

<b>AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT</b>				1. CONTRACT ID CODE See Block #2		PAGE OF PAGES 1 of 43	
2. AMENDMENT/MODIFICATION NO. 0001		3. EFFECTIVE DATE 09 JUN 2004		4. REQUISITION/PURCHASE REQ.NO.		5. PROJECT NO. (If applicable)	
6. ISSUED BY    ASC DET3                      CODE                      FA8620 USAF/AFMC AERONAUTICAL SYSTEMS CENTER (ASC) 2640 LOOP ROAD WEST, ROOM 203 WRIGHT-PATTERSON AFB OH 45433-7106 NANCY M. WILLIAMSON    3214941795  Nancy.Williamson@patrick.af.mil				7. ADMINISTERED BY (If other than Item 6)                      CODE			
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)  TBD				(X)		9A. AMENDMENT OF SOLICITATION NO.  FA8620-04-R-3405	
				X		9B. DATED (SEE ITEM 11)  24 MAY 2004	
						10A. MODIFICATION OF CONTRACT/ORDER NO.	
						10B. DATED (SEE ITEM 13)	
CODE		FACILITY CODE					
<b>11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS</b>							
<input checked="" type="checkbox"/> The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers <input type="checkbox"/> is extended, <input checked="" type="checkbox"/> is not extended. Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning <u>0</u> copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. <b>FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER.</b> If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.							
12. ACCOUNTING AND APPROPRIATION DATA (If required)							
<b>13. THIS ITEM APPLIES ONLY TO MODIFICATION OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.</b>							
(X)							
A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (                      ) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. ITEM 10A.							
B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation data, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).							
C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:							
D. OTHER (Specify type of modification and authority)							
E. IMPORTANT: Contractor <input type="checkbox"/> is not, <input type="checkbox"/> is required to sign this document and return _____ copies to the issuing office.							
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)  Subject: Administrative Changes to US NDC Phase 3 RFP							
Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.							
15A. NAME AND TITLE OF SIGNER (Type or print).				16A. NAME AND TITLE OF SIGNER (Type or print)  NANCY M. WILLIAMSON			
15B. CONTRACTOR/OFFEROR		15C. DATE SIGNED		16B. UNITED STATES OF AMERICA		16C. DATE SIGNED	
_____ (Signature of person authorized to sign)				BY _____ (Signature of Contracting Officer)			

1. The purpose of this amendment is to correct administrative errors in Sections B, K, L, M, Attachment 7 and Exhibit A.

*The following clauses are changed in Section B:*

**B045 AWARD FEE (Jun 2000)**

In addition to the fee set forth elsewhere in the contract, the Contractor may earn a total award fee amount of up to 12% R&D, 7% Sustainment (insert maximum award fee) on the basis of performance during the performance periods.

(i) Monitoring of performance. The Contractor's performance will be monitored continually by the performance monitors whose findings are reported to the Award Fee Review Board (AWRB). The AWRB recommends an award fee to the Fee Determining Official (FDO) who makes the final decision of the award fee amount paid based on the Contractor's performance during the award fee evaluation period.

(ii) Award fee plan. The evaluation criteria and associated grades are specified in the award fee plan. The evaluation periods with the associated award fee pool amounts and performance criteria with associated percentages of available award fee are also specified in the award fee plan. Upon contract award, the contractor will be provided the FDO-approved award fee plan.

(iii) Modification of award fee plan. Unilateral changes may be made to the award fee plan if the Contractor is provided written notification by the Contracting Officer before the start of the upcoming evaluation period. Changes affecting the current evaluation period must be by bilateral agreement.

(iv) Self-evaluation. The Contractor may submit to the Contracting Officer, within five (5) working days after the end of each award fee evaluation period, a brief written self-evaluation of its performance for the period. This self-evaluation shall not exceed TBD pages (**propose number of pages**\_\_\_\_\_). This self-evaluation will be used in the AFRB's evaluation of the Contractor's performance during this period.

(v) Determination and Methodology. The determination and methodology for determining the award-fee amount are unilateral decisions made solely at the discretion of the Government.

(vi) Award fee payment.

(A) Award fee is not subject to the "Allowable Cost and Payment" or "Termination (Cost Reimbursement)" clauses of this contract.

(b) The Contractor may bill for the award fee immediately upon receipt of the Contracting Officer's authorization for payment of the earned award fee amount.

<end of clause>

*The following clauses are changed in Section K:*

**AFMC 5352.215-9007 USE OF NON-GOVERNMENT ADVISORS (AFMC) (Nov 1998)**

(a) Offerors are advised that technical and cost/price data submitted to the Government in response to this solicitation may be released to non-Government advisors for review and analysis. The non-Government advisor support will be provided by:

Name of firm(s)  
Command Technologies, Inc.  
Innolog  
**ARINC**

(b) Offerors shall complete paragraph (b)(2) or provide written objection to disclosure as indicated in paragraph (b)(1). If the offeror objects to disclosure of a portion of the proposal, the consent in (b)(2) should be provided for the remainder of the proposal.

(1) Any objection to disclosure:

(i) Shall be provided in writing to the contracting officer within 10 days of RFP issuance; and

(ii) Shall include a detailed statement of the basis for the objection. The detailed statement shall identify the specific portions of the proposal the offeror objects to disclosure to non-Government advisors. (2) I understand technical and cost/price data submitted to the Government in response to this solicitation may be released to non-Government advisors. I consent to release of any (unless objection is provided in (b)(1) above) proprietary, confidential, or privileged commercial or financial data provided by the firm(s) named below in response to this solicitation, to non-Government advisors for review and analysis:

Firm:

Name (individual authorized to commit firm):

Title:

Date of Execution:  
<end of clause>

*The following clauses are changed in Section L:*

**L100 INFORMATION TO OFFERORS (ITO) AND INSTRUCTIONS FOR PROPOSAL PREPARATION (Dec 2003)**

**1.0 Program Structure and Objectives**

**1.1. Budget/Funding Information**

1.1.1 The program/budget funding profile for planning is:

Funding type	FY 04	FY 05	FY 06	FY 07	FY 08	FY 09	Total
<b>3400 (O&amp;M)</b>	<b>0.2 M</b>	<b>2.0 M</b>	<b>2.0 M</b>	<b>2.0 M</b>	<b>2.0 M</b>	<b>2.0 M</b>	<b>10.5 M (CLINS 0001-0006)</b>
<b>3600 (R&amp;D)</b>	<b>0.5 M</b>	<b>2.5 M</b>	<b>2.5 M</b>	<b>2.5 M</b>	<b>2.5 M</b>	<b>2.5 M</b>	<b>13.0 M (CLINS 0007-0011)</b>

1.1.2 The technical effort and the schedule effort shall conform to the funding available, by fiscal year, in order to be considered eligible for award. The offeror shall phase its technical/schedule effort accordingly.

**1.2 Integrated Product Development (IPD)**

1.2.1 The Government is implementing a streamlined approach based on Integrated Product Development (IPD) for this US NDC Phase 3 program effort. This approach provides flexibility to the offeror in planning and executing an effective effort while giving the Government greater visibility into this effort. Two of the major features of this approach are reviewed below.

1.2.2 The first major feature addresses planning the contract work effort and preparing the contract documentation. The Government's solicitation provides the offeror a Model Contract (Sections A - K), Section L (ITO), Section M (Evaluation Factors For Award), Performance Requirements, Statement of Objectives (SOO), Preliminary Work Breakdown Structure (PWBS), Applicable Documents (including Technical Requirements Document (TRD)), Contract Data Requirements List (CDRL), and Contract Line Item Numbers (CLINs). Based on the solicitation requirements, the offeror shall submit a proposal a completed Model Contract, Contract WBS (CWBS), a performance-based Statement of Work (SOW), Applicable Documents, Integrated Master Plan (IMP), Integrated Master Schedule (IMS), enhanced CDRL, and Contract Line Items (CLINs), in accordance with (IAW) the detailed proposal preparation instructions found in this solicitation.

1.2.3 The IMP expands on the CWBS, its dictionary, and the SOW tasks, and establishes, by key events and selective narratives, the significant accomplishments and corresponding accomplishment criteria for both the products and processes necessary to accomplish the effort. Selected narratives should be included to explain where in the process the criteria apply. The IMP will be placed on contract. The IMS supports the IMP and shows the schedule of tasks necessary to achieve each significant accomplishment. The IMP and IMS will be used to track the progress of the effort, based heavily on the accomplishment criteria, which serve as measures of progress. Detailed instructions for preparation of the IMP and IMS are given below.

1.2.4 The second major feature of the IPD approach is the use of Integrated Product Teams (IPTs) to implement the event-driven plan described above. This approach involves a teaming of Government and contractor functional disciplines to integrate and concurrently apply all necessary processes to produce effective and efficient products that satisfy mission requirements.

## 2.0 General Instructions for Proposal Preparation

2.0.1 This section of the ITO provides general guidance for preparing proposals as well as specific instructions on the format and content of the proposal. The offeror's proposal shall include all data and information requested by the ITO and shall be submitted IAW these instructions. The proposal shall be compliant with the requirements set forth in the Statement of Objectives (SOO), System Requirements Document (SRD), Contract Data Requirements List (CDRL), and Model Contract. Non-conformance with the instructions provided in this ITO may result in an unfavorable proposal evaluation.

2.0.2 The proposal shall be clear, concise, and include sufficient detail for effective evaluation and for substantiating the validity of stated claims. The proposal should not simply rephrase or restate the Government's requirements but rather shall provide convincing rationale to address how the offeror intends to meet these requirements. Offerors shall assume that the Government has no prior knowledge of their facilities and experience. The Government will base its evaluation on the information presented in the offeror's proposal. Oral presentations of the offeror's proposal will not be required.

2.0.3 Elaborate brochures or documentation, binding, detailed art work, or other embellishments are unnecessary and are not desired.

2.0.4 The proposal acceptance period is specified in Section A of the model contract/solicitation. The offeror shall make a clear statement in Section A of its proposal documentation volume that the proposal is valid until this date.

2.0.5 Contractual Commitment. The offeror shall include all proposed work effort described in its proposal in the SOW or other contractually binding document. NOTE: All objectives proposed by the offeror shall be evaluated and may, at the government's discretion, be incorporated contractually.

### 2.0.6 Discrepancies

If the offeror believes that the requirements in these instructions contain an error, omission, or are otherwise unsound, the offeror shall immediately notify the CO in writing and provide supporting rationale. The Government reserves the right to award a contract based on initial proposals, as received, without discussion.

2.0.7 IAW FAR Subpart 4.8, Government Contract Files, the Government will retain one copy of all unsuccessful proposals. Unless the offeror requests otherwise, the Government will destroy extra copies of such unsuccessful proposals.

## 2.1 General Information

### 2.1.1 Point of Contact

The Contracting Officer (CO) is the sole point of contact for this acquisition. Address any questions or concerns you may have to the CO. Written requests for clarification may be sent to the CO at the address located in Section A of the model contract/solicitation.

#### 2.1.2 Award Notice

The CO will notify unsuccessful offerors IAW FAR 15.5, Preaward, Award, and Postaward Notifications, Protests, and Mistakes.

#### 2.1.3 Debriefings

The CO will notify offerors of any decision to exclude them from the competitive range, whereupon they may request and receive a debriefing IAW FAR 15.505, Preaward Debriefing of Offerors. Unsuccessful offerors within the competitive range may request and receive a debriefing IAW FAR 15.506, Postaward Debriefing of Offerors. Offerors desiring debriefing shall make their request IAW the requirements of FAR 15.505 or 15.506, as applicable.

#### 2.1.4 Reference Library

##### 2.1.4.1 Unclassified Electronic Library

A reference library has been established containing the draft solicitation, its attachments, and other documents for information purposes.

This library is located on the web at URL: <<http://www.pixs.wpafb.af.mil/pixslibr/NDC3/NDC3.asp>>.

The point of contact for the library is set forth on the US NDC Phase 3 Program PIXS web site.

The library will be available 24 hours per day 7 days per week until the established proposal due date.

##### 2.1.4.2 Classified Library Procedures

A classified electronic library will be located in Room BS300, Bldg 989, Patrick AFB, FL. Listed below are procedures that will be followed by those who wish to have access to the classified electronic library. The library contains classified Security Classification Guides and other classified documents related to the US National Data Center program.

a. All personnel wishing to gain access to the classified electronic library MUST possess, as a minimum, a valid SECRET clearance.

b. All persons must have a valid visitor authorization letter (VAL) on file with the Detachment 3 Security Manager prior to the visit. The VAL must contain full name, social security number, date of birth, place of birth, clearance level, date of clearance, type of clearance (SSBI, SBPR, NAC, etc.), and organization that granted clearance. The VAL will be faxed to Al Kinard at (321) 494-9837.

c. After the VAL has been sent, an appointment must be made to view the electronic library. No one will be given access to the library without an appointment. Appointments will be given in one hour increments from 0900-1100 and 1300-1600, Monday through Thursday. Appointments will be requested electronically through the Contracting Officer: Nancy.Williamson@patrick.af.mil.

d. Personnel viewing the classified electronic will be escorted whenever they leave room BS300. Contractor personnel are in building 989 to view the contents of the classified electronic library, nothing else.

e. Contractors will not access any computer system while in bldg 989 except that which is appointed in room BS300 which is to be used explicitly for the source selection.

f. Contractors will not have access to any safe while in bldg 989.

g. Contractors will not be given access to any classified material other than that specifically designated as necessary for the source selection.

h. All unauthorized electronic devices are prohibited in building 989 to include: cell phones, pagers, personal data assistants, thumb drives, or any other recordable media.

- i. All notes will be submitted to the Detachment Security Manager for classification determination.

Failure to comply with any of the above procedures will be grounds for removal from building 989. After a second violation of the above procedures, individuals will be denied access to building 989.

2.2 Surveys, Capability/Capacity Reviews, and Site Visits. Surveys, capability/capacity reviews, and site visits may be conducted at the offeror's facility(s); these may be conducted by any, or all, of the following: the Source Selection Evaluation Team (SSET), Defense Contract Management Agency (DCMA), Defense Contract Audit Agency (DCAA), or other Government organizations.

### 2.3 Proposal Organization/Number of Copies/Page Limits/Formatting

The offeror shall prepare the proposal as set forth in the Proposal Organization Table (Table 2.3 below). The titles and contents of the volumes shall be as defined in this table. All of the volumes shall be within the required page limits and submitted in the number of copies specified in Table 2.3. The attachments identified in the table shall be separately bound in three-ring, loose-leaf binders, as necessary. The contents of each proposal volume are described in the ITO paragraph as noted in the table below.

Table 2.3 - Proposal Organization

VOLUME LIMIT	ITO Paragraph Number	VOLUME TITLE	COPIES Hard/ Electronic		PAGE
I	3.0	Executive Summary	2/4	2	
II	4.0	Mission Capability	2/4	200	
II Addendum	2.3.3	Classified Information	2/4	Included in Volume II	
III	5.0	Cost/Price	2/4	No Limit	
IV	6.0	Contract Documentation	2/4	No Limit	
V	7.0	Relevant Past and Present Performance	2/4	Limit to ten (10) past/ present contracts per prime contractor/ subcontractor.	Page limit per contract: 4

#### 2.3.1 Page Limitations

Page limitations shall be treated as maximums. If exceeded, the excess pages will not be read nor considered in the evaluation of the proposal and (for paper copies) will be returned to the offeror as soon as practicable. Page counts shall commence at the first page of each volume that contains printed material. Excess pages will be removed from the back of that proposed volume. Page limitations shall be placed on responses to Evaluation Notices (ENs). The specified page limits for EN responses will be identified in the letters forwarding the ENs to the offerors. When both sides of a sheet display printed material, it shall be counted as 2 pages. Each page shall be counted except the following: cover pages, tables of contents, indexes, tabs, glossaries.

#### 2.3.2 Cost or Pricing Information

All cost or pricing information shall be included ONLY in the Cost/Price volume and Contract Documentation volumes. Cost trade-off information, work-hour estimates, and material kinds and quantities may be used in other volumes only as appropriate for presenting rationale for alternatives or design and trade-off decisions.

#### 2.3.3 Classified Information

Where classified information is required in the proposal response, it shall be provided as a classified supplement and bound in a single classified addendum to the Mission Capability volume. No proposal volume shall contain classified information except for the Volume II Addendum entitled "Classified Information". Each entry in the classified addendum shall be referenced to the proposal volume, page number, and paragraph number to which it applies. Similarly, a reference shall be placed in the unclassified volume where the classified insert applies, giving the page and paragraph numbers within the addendum where it can be found. Binding shall conform to the same directions as those given for unclassified portions of the proposal. The classified addendum shall be separately bound with an applicable security designation color cover, conforming to the DD Form 254, Contract Security

Classification Specification, and the Security Classification Guide provided in this solicitation. Pages in the classified addendum shall be included in the page count for the applicable volume.

#### 2.3.4 Cross Referencing

2.3.4.1 To the greatest extent possible, each volume shall be written on a stand-alone basis so that its contents may be evaluated with a minimum of cross referencing to other volumes of the proposal. Information required for proposal evaluation, which is not found in its designated volume, will be assumed to have been omitted from the proposal. Cross-referencing within a proposal volume is permitted where its use would conserve space without impairing clarity.

2.3.4.2 The offeror shall provide a cross reference matrix indicating, by ITO, SOO, and/or System Requirements Document (SRD) paragraph number; CLIN, and/or CDRL number, the corresponding volume and proposal paragraph number which addresses the referenced item.

#### 2.3.5 Indexing, Tables of Contents, and Tabs

Each volume shall contain a more detailed table of contents to delineate the subparagraphs within that volume. Tab indexing shall be used to identify sections.

#### 2.3.6 Glossary of Abbreviations and Acronyms

Each volume shall contain a glossary of all abbreviations and acronyms used and an explanation for each.

#### 2.3.7 Page Size and Format

2.3.7.1 The limitations set forth below shall apply to both electronic and hardcopy proposals.

2.3.7.2 Page size shall be 8.5 x 11 inches, not including foldouts. Pages shall be single spaced with 1.5 line spacing. Except for the reproduced sections of the solicitation document, the font size shall be no less than 12. Tracking, kerning, and leading values shall not be changed from the default values of the word processing or page layout software. Margins shall be at least 1 inch on the top and bottom and each side. Pages shall be numbered sequentially by volume. These page format restrictions shall also apply to responses to ENs.

#### 2.3.7.3 Foldouts

Legible tables, charts, graphs, and figures shall be used wherever practical to depict organizations, systems and layout, implementation schedules, plans, etc. These displays shall be uncomplicated, legible and shall not exceed 11 by 17 inches in size. Foldout pages shall fold entirely within the volume, and each 8.5 x 11 surface of a foldout shall be counted as a separate page. Foldout pages may only be used for large tables, charts, graphs, diagrams, and schematics - not for pages of text. For tables, charts, graphs, and figures, the text shall be no smaller than 12 font.

#### 2.3.8 Binding and Labeling

Each volume of the proposal should be separately bound in a three-ring loose leaf binder which shall permit the volume to lie flat when open. Staples shall not be used. A cover sheet should be inserted in each book, clearly marked with the volume number, title, copy number, solicitation identification, and the offeror's name. The same identifying data should be placed on the spine of each binder. All unclassified document binders shall have a color other than red or other applicable security designation colors. Apply all appropriate markings including those prescribed IAW FAR 52.215-1, Instructions to Offerors-Competitive Acquisition, paragraph (e), Restriction on disclosure and use of data, and 3.104-4, Disclosure, Protection, and Marking of Contractor Bid or Proposal Information and Source Selection Information.

#### 2.4 Electronic Offers

For electronic copies, indicate on each diskette or CD-ROM the volume number and title. Use separate files to permit rapid location of all portions (to include exhibits, annexes, and attachments, if any) of the proposal. All classified information shall be provided on a separate diskette/CD-ROM. No other proposal diskette/CD-ROM shall contain classified information. Use IBM-compatible, virus-free 3.5 inch high density diskettes with the "read only" notch open or CD ROMs. Each volume shall be on a different diskette or in separate directories on a CD-ROM. If files are compressed, the necessary decompression program must be included. The electronic copies of the proposal shall be submitted in a format readable by Microsoft (MS) Word 97, MS Excel 97, MS-Project 97, and MS-Power Point 97, as applicable.

## 2.5 Proposal Distribution

Reserved

2.5.1 The "original" proposal copy shall be identified. All hard copies and two electronic copies of the proposal shall be addressed to the Contracting Officer and mailed to:

Detachment 3, Aeronautical Systems Center  
ATTN: Ms. Nancy Williamson, Contracting Officer  
1030 South Highway A1A  
Patrick AFB FL 32925-3002

2.5.2 Send one electronic copy to the offeror's Administrative Contracting Officer (ACO). Advise the ACO that the proposal should be treated as "Source Selection Information-See FAR 2.101 and 3.104" and "For Official Use Only".

2.4.3 Send one electronic copy to the offeror's servicing DCAA office. Advise DCAA that the proposal should be treated as "Source Selection Information-See FAR 2.101 and 3.104" and "For Official Use Only".

## 3.0 Instructions for Preparation of Volume I - Executive Summary

### 3.1 Narrative Summary

The offeror shall provide a concise narrative summary of the entire proposal, to include significant risks, and a highlight of any key or unique features. Exclude all cost/price information from the Executive Summary volume. The salient features discussed should tie in with the evaluation factors and subfactors set forth in Section M, Evaluation Factors For Award. Material presented in the Executive Summary volume shall not be considered as meeting the requirements for any portions of other volumes of the proposal nor shall it be evaluated.

### 3.2 Table of Contents

The offeror shall provide a master table of contents of the entire proposal.

## 4.0 Instructions for Preparation of Volume II - Mission Capability Volume

### 4.1 General

The Mission Capability volume shall be specific and complete. Legibility, clarity, and coherence are very important. Proposal content will be evaluated against the Mission Capability subfactors set forth and defined in Section M, Evaluation Factors For Award. Using the instructions provided below, provide as specifically as possible the actual methodology to be used for accomplishing/satisfying these subfactors. All requirements specified in the solicitation are mandatory. The offeror, via proposal submission, represents that it will perform all requirements specified in the solicitation (also see paragraph 2.0.5 above). Do not merely reiterate the objectives or reformulate the requirements specified in the solicitation.

### 4.2 Format and Specific Content

#### 4.2.1 Mission Capability and Proposal Risk



4.2.1.1 Mission Capability and Proposal Risk shall be addressed in the Mission Capability volume.

4.2.1.2 The offeror shall provide its proposed approach to meet the requirements of each Mission Capability subfactor. Also discuss the risks in the proposed approach in terms of mission capability/performance, cost, and/or schedule.

4.2.1.3 Address Proposal Risk by identifying those aspects of the proposal that involve Mission Capability subfactor and/or schedule risk and/or cost risk and classify each IAW AFFARS 5315.305(a)(3)(B), Proposal risk. Provide the rationale for each risk and risk rating, to include quantitative estimates of the impact on cost, schedule, and performance. Describe the impact of each identified risk in terms of its potential to interfere with or prevent the successful accomplishment of other contract requirements (e.g., SOW or specification requirements). Suggest a realistic "work-around" or risk mitigator for identified risks that will eliminate or reduce risk to an acceptable level. Identify and classify any new risks introduced by such risk mitigation.

#### 4.2.2 Volume Organization

The Mission Capability volume shall be organized according to the following general outline:

Table of Contents

List of Tables and Drawings

Glossary

Cross Reference Matrix

Transition Subfactor

Total System Integration Responsibility Subfactor

System Engineering/Program Management Subfactor

System Performance Subfactor

Risk Matrix

#### 4.2.3 Subfactor Proposal Requirements

##### 4.2.3.1 Transition Subfactor

Provide a transition plan that addresses procedures that the offeror will use to assure sufficient numbers of skilled employees to assume responsibilities for all contract functions, ensure a successful transition from the incumbent, and meet the requirements set forth in the SOO and SRD as well as the tasks proposed in the offeror's SOW.

##### 4.2.3.1.1 The plan shall contain the following information:

- (1) Information required by FAR 52.222-46 (submit in Volume III, Cost/Price).
- (2) Plans for personnel retention, low turnover rate, and filling vacancies.
- (3) Plans for ensuring personnel have the required clearances, certifications, qualifications, and education at the beginning of the period(s) of performance.
- (4) Management structure (organization chart), processes for controlling/managing/dispatching personnel, quality control.
- (5) Recruitment processes (incentives and benefits) for acquiring and retaining qualified personnel and continued training process (Include a metric for vacancy rate.)
- (6) Plans for limiting substitutions of qualifications to only exceptional situations during the period of performance.
- (7) Procedures to provide sufficient numbers of skilled employees to assume responsibilities for all contract functions for a successful transition from the incumbents performing this work.
- (8) Identify key personnel including, but not limited to program manager, deputy program manager, chief engineer, the chief scientist, and personnel requiring hands on access to the operational hardware.
- (9) Identify positions that will participate in the transition by labor category.
- (10) Include a detailed schedule for transition.
- (11) Describe how you will provide personnel with appropriate clearances to meet the transition period requirements.

#### 4.2.3.2 Total System Integration Responsibility Subfactor

Discuss the approach for integration of prime contractor developed/modified software and Government provided third party software products into the US NDC system baseline. Provide Associate Contractor Agreements (ACAs) or letters of intent with third party software developers/vendors.

#### 4.2.3.3 Systems Engineering and Program Management Subfactor

Provide prime contractor and major subcontractor program organization structure and (discuss how it fits into the corporate structure. Show key management positions, duties, and interface to Government counterparts. Discuss proposed facilities and management between facilities. Discuss internal software development processes, and provide examples of successful application. Provide the internal company software configuration control plan, the internal company software quality assurance (QA) plan, and internal data management plans, to include how data quality is managed. Describe planned approach, methods, and procedures for maintaining and preserving current US NDC system performance capabilities and its basic functions (capability to receive, process, archive, and report events of interest). Describe method/methodology for meeting all SRD threshold (mandatory) requirements from the offeror's System Specification (SS) and decomposed lower level SS requirements (Sub-System Specification level) through a series of spirals. All threshold (mandatory) requirements identified in the SRD shall be allocated to a spiral. Describe method/methodology for meeting any of the SRD objective (desirable) requirements, both priority 1 and priority 2, in addition to the threshold requirements, through the series of spirals. Appendix A to the SRD is for informational purposes only and is included to inform you of what AFTAC has in mind today for future work and thus allows you to structure a team and proposal capable of handling these future studies. Describe methods for meeting software and hardware qualification and verification requirements (e.g., Functional Qualification Testing (FQT), Functional Configuration Audit (FCA), Regression Testing, and Development Test (DT) and Operational Test (OT) at AFTAC and Goodfellow AFB (or a combination thereof). The preliminary Software Development Plan and Software Development Capability Evaluation (SDCE) will be used to evaluate the capability to manage, develop, and integrate software required to satisfy the performance requirements and software testing (FQT). The Software Development Plan shall include descriptions in managing system/application software, operating system, sub-system software, support equipment software, simulator or trainer software, support software, and mission planning software. Describe the approach to accomplishing software Test and Evaluation (FQT and FCA). Describe the approach for conducting a joint test program utilizing Det 3 and AFTAC personnel test crew. Describe, as a minimum: test organization, roles and responsibilities, scope, test readiness review, test anomalies and/or deficiency reports and approaches/methodology for resolutions, methodology for SRD and SS verification per Section 4 compliance. Provide a proposed SRD that incorporates the threshold and objective requirements and proposed verification methods. The proposed SRD, when accepted by the Government, shall be put on contract at the time of award. Provide the methodology for resource allocation and management between the development and sustainment efforts that ensure the operational US NDC system will meet mission requirements including operational availability. The offeror shall include a training outline that addresses newly developed software and/or new/replacement equipment. Provide the approach to accomplishing delta (difference between Phase 2 and Phase 3) general familiarization training for operators and/or maintainers (AF Skill Level 5). Provide the approach to accomplishing delta (difference between Phase 2 and Phase 3) revisions to the current US NDC Technical Instructions (TIs) to ensure the accuracy and completeness of TIs.

4.2.3.3.1 Technical Reviews and Audits: . The offeror shall submit plans for accomplishing technical reviews and audits, along with supporting rationale for those events. .

4.2.3.3.2 Key personnel qualifications summary. Provide the following for key personnel:

Name:

Title:

Job Category/Level:

NOTE: Provide current and proposed category/level. Identify percentage of the individual's time that will be dedicated to proposed program

Security Clearance:

Education:

NOTE: Provide college/university/degree/graduate degree/courses/year and professional courses/title/year

Professional Experience Summary:

NOTE: Provide the number of years of experience in a particular field or area, particularly DoD acquisition experience, together with years of experience with specific systems.

Specific Experience:

NOTE: Provide present job assignment and past job assignments

DoD Acquisition Experience:

NOTE: Provide number of years and description of experience

Professional Activities and Achievements:

Awards:

Significant Publications:

Professional Societies:

Specific On The Job Meritorious Achievements

#### 4.2.3.4 System Performance Subfactor

Provide the prime contractor's Phase 3 Spiral structure. Discuss, in detail, software development activities associated with Global Association (GA) tuning, Frequency-Waveform (fk) screening, and Knowledge Base (KB) integration.

#### 4.2.4 Contract Work Breakdown Structure (CWBS) and CWBS Dictionary

A PWBS for the US NDC Phase 3 program has been provided as an attachment to the solicitation. The reference document for developing the WBS and dictionary is MIL-HDBK-881, Work Breakdown Structure. The offeror shall develop a CWBS, and dictionary, which reflects its view of the contract effort. The CWBS shall serve as the framework for organizing the US NDC Phase 3 program to include in-house, inter-divisional, subcontractor, and associate contractor activities. As a minimum, the offeror's CWBS must include all elements identified in the WBS/CLIN/SOW Matrix at Attachment B. The offeror may add or re-arrange the PWBS elements shown IAW its approach, but supporting rationale shall be provided. The CWBS shall be developed to a depth (level) and breadth sufficient to accurately describe the offeror's understanding of the effort required for the US NDC Phase 3 program as reflected in the SOW. The offeror's proposed CWBS and corresponding dictionary shall be provided as part of the model contract. The mapping of CLINs to WBS elements shall be completely consistent with that shown in Section B of the Model Contract.

#### 4.2.5 Statement of Work (SOW)

A SOO is provided as an attachment to the solicitation. This SOO represents the Government's minimum objectives for the US NDC Phase 3 program. The offeror shall use the SOO to propose a WBS-structured performance-based SOW that expands upon these minimum objectives to the extent necessary to conduct this acquisition. CLINS 0001 through 0006 shall be proposed in accordance with Performance Based Service Acquisition requirements. The proposed SOW shall define the tasks required for the US NDC Phase 3 program ensuring all minimum requirements of the Government provided SOO and preliminary WBS have been addressed. The proposed SOW shall consist of tasking statements. Each tasking statement shall reference the CDRL items that will be delivered by that task. The proposed SOW shall not contain informational notes, as the Mission Capability volume provides ample opportunity for discussion and description of the offeror's approach, and the IMP and IMS provide the mechanisms for describing specific details of the offeror's approach. The tasking statements in the SOW, elements of the CWBS, and the IMP and IMS sections shall use a common numbering system, an example of which is shown in Figure 2. The proposed SOW, when accepted by the Government, shall be put on contract at the time of award.

#### 4.2.6 Technical Instructions

The proposed SOW shall contain tasking for the contractor to generate page changes to the existing TIs as specified in the CDRL D001.

4.2.6.1 Verification Support. The proposed SOW shall contain tasking for the contractor to provide equipment and personnel required to support the Government TI Verification. This support shall consist of personnel, e.g. a technical writer and an engineer, to resolve problems during verification, program-peculiar equipment and supplies, maintenance of TI configuration, and incorporation of Government comments.

#### 4.2.7 Applicable Documents

A list of Background Documents has been provided in paragraph 2.0 of the SRD. The offeror shall provide a list of any offeror, industry, commercial, and tailored Government standards, specifications, processes, and/or practices selected as compliance documents. The offeror shall also provide a list of all Government compliance documents intended for use as compliance documents during the course of this contract. The offeror shall submit a list of these documents, including any tailoring instructions, as an annex to the proposed SOW (which when accepted by the Government, will be put on contract at award, see Paragraph 4.2.5). The offeror shall submit the completed proposed compliance documents as a separately bound document.

#### 4.2.8 Integrated Master Plan (IMP)

The purpose of the IMP is to demonstrate that the US NDC Phase 3 program is structured to minimize and control risk, to accomplish up-front summary planning and commitment, to provide a basis for subsequent detailed planning, to instill a balanced design discipline, to measure progress of the US NDC Phase 3 program life-cycle requirements, and to provide management with in-process verification of requirements in order to make informed milestone decisions. The proposed IMP, when accepted by the Government, shall be put on contract at the time of award.

4.2.8.1 The IMP is an offeror-generated document that captures the core activities and processes necessary to implement the program. The IMP shall be written as an event-based plan containing significant accomplishments and accomplishment criteria needed to successfully complete each major program milestone. IMP milestones shall be event-oriented and represent IPD (encompassing all functional disciplines) of the CWBS elements. The IMP measures program maturity by marking the initiation/conclusion of events/milestones, significant accomplishments, and associated completion criteria that describe the total work effort necessary to acquire a system that meets contract requirements. The IMP shall contain narratives that provide the Government a planning and management tool for providing additional insight into the offeror's total work effort and for addressing how the offeror will develop, implement, and commit to the total contracted effort.

4.2.8.2 The offeror's overall approach shall provide traceability from the system-level requirements (given in the system-level specification) through the offeror's CWBS and SOW to the IMP and IMS and to the IPT organization. The IMP shall be a single plan for the entire effort, including associate and/or major subcontractor activities. There shall be an IMP section/subsection for each of the elements in the offeror's proposed CWBS, as linked to the SOW. Each section/ subsection of the IMP shall contain Events, Significant Accomplishments, Accomplishment Criteria, and selected Narratives as called for in the example SOW. The traceability to IPT organization allocates responsibility and accountability and should indicate primary and supporting IPTs.

a. Event: An IMP event is a key contractual or programmatic event defined by the Government or the offeror, which defines progress at a specific point in time. IMP events mark the conclusion/initiation of intervals of major program activity and serve as decision-oriented measures of program activity related to the program's maturity associated with continued system development. The offeror is encouraged to identify incremental reviews and milestones and additional events that best reflect the proposed program approach. The offeror shall include definitions of each event at the beginning of the IMP. IMP events shall

be properly sequenced and may include demonstration milestones, technical or program reviews and audits, and other key decision points. For each IMP event, there shall be one or more entry or exit significant accomplishments (either entry or exit).

b. Significant Accomplishment: Significant accomplishments are interim or final critical efforts that must be completed prior to entering or exiting an event. Significant accomplishments are organized first by the CWBS element/product and then by functional area. Entry accomplishments reflect what must be complete to initiate an event. Exit accomplishments reflect what must be done in order for the event to be successfully closed and that the US NDC Phase 3 program is ready for the next event. For each significant accomplishment, there shall be one or more accomplishment criteria. Significant accomplishments include:

1. A desired result at a specified event that indicates a level of design maturity.
2. A discrete step in a process.
3. A description of interrelationship between different functional disciplines.

The Government is seeking Significant Accomplishments that provide sufficient insight to the process for achieving objectives of the SOO. The accomplishments shall be sequenced in a manner that ensures a logical path is maintained throughout the effort and tracks against key events.

c. Accomplishment Criteria: Measurable and useful indicators demonstrating that the required level of maturity/progress in an associated significant accomplishment has been achieved. Accomplishment criteria include:

1. Completed work efforts.
2. Activities which confirm the value of the technical parameters.  
Internal documents which provide results of in-process verification (successfully completed analysis or other testing activities).
3. Completion of critical activities required by the offeror's internal program plans/operating instructions.

Accomplishment Criteria shall include the use of Technical Performance Measures (TPMs) and metrics to track detailed tasking in the IMS. Preferably, the accomplishment criteria should avoid the use of 'percent completed', and avoid citing data item report numbers rather than identifying and summarizing results.

d. Narratives: A collection of concise statements, with flow diagrams as necessary, describing the offeror's key functional/management processes and procedures. The IMP narrative is used to supplement IMP accomplishments and associated criteria, provide insight into any SOW tasks not described by IMP accomplishments/criteria, and implement the IPD process. In particular, a narrative should provide enough information to identify where the accomplishment criteria apply (i.e., "pickoff points") on the associated process. The narrative describes the minimum essential processes that the offeror will apply to their products in conformance with Government requirements.

4.2.8.3 The narratives shall complement the significant accomplishment and accomplishment criteria by indicating where in the particular process the criteria apply. The concise statements, in addition to describing the offeror's key functional/management processes and procedures, shall describe their relationship to the IPD process and an overview of the efforts required to implement them. The narrative shall address only the key elements of implementing or developing a process/procedure (i.e., what the process/procedure will be and how it will be implemented and tracked), since the narrative will be included in the contract. The narrative is not the forum for providing supporting information/rationale (i.e., why a particular approach has been taken). Each narrative subject area shall be arranged in the following format: A. Objective, B. Identification of Governing Documentation, and C. Process (if applicable). The Objective is a brief statement of desired results and is to be traceable to the SOO. The Governing Documentation lists the Government documents and/or offeror practices or procedures to be used to achieve the objective. The offeror shall clearly state whether Government documents will be tailored further and reference in which of the offeror's compliance documentation they will be tailored. The

narrative shall be consistent with applicable technical and management approaches described in the Mission Capability volume of the proposal.

#### 4.2.8.4 IMP Considerations

The offeror shall include specific areas that may be of Government interest, with narratives, in the IMP Specialty Engineering Disciplines (e.g., Reliability & Maintainability (R&M), System Safety, Human Engineering, etc.). Integrated Logistics Support, including but not limited to training, technical instruction publications, and non-developmental item/commercial off the shelf (NDI/COTS) utilization and support.

Transition Planning.

Configuration Management Planning and Transition Configuration Management Planning.

Software development plan that identifies:

Integration between systems engineering processes and software development processes.

Assurance of software quality.

Developmental Test & Evaluation (DT&E) and Operational Test & Evaluation (OT&E) planning, including completion of the Verification Cross Reference Matrix and participation in DT&E/IOT&E. Internal and external interface and external interface implementation, control planning, and support for other AFSCN contractors, as necessary.

Development change control planning.

A plan for phase-in from predecessor to US NDC Phase 3 program.

Planning for reduction of life cycle costs.

Additionally, the offeror shall consider the following when preparing the IMP:

Failure and Deficiency Reporting, Analysis, and Corrective Action.

Government-Furnished Property Utilization.

System Security Engineering Management Planning.

System Safety/Health Risk Engineering, Environmental and Hazardous Materials Management, and Hazard Status Reporting.

Quality program planning.

Planning for handling deviations and waivers.

Planning for information data exchange with Government.

Planning for subcontractor and associate contractor relationships.

#### 4.2.9 Integrated Master Schedule (IMS)

The intent of this section is to obtain a functionally integrated understanding of the proposal with clear tracks between the technical, cost, schedule, management, etc., in a way that provides the Government confidence that the program is structured to be executable for the resources indicated. The IMS is a detailed task and timing of the work effort in the IMP and is used as the primary tracking tool for technical and schedule status. For evaluation purposes, the IMS should include not more than 200 entries or activities.

##### 4.2.9.1

The IMS is an integrated and networked multi-layered schedule of program/project tasks. The IMS identifies all IMP events, accomplishment, and criteria and the expected dates of each. These dates are based on the calendar dates provided as the starting point and the logical flow of dates provided by calculating the addition of duration of all tasks using typical schedule networking tools. The IMS tasks will be directly traceable to the WBS, IMP, SOW, and CLINs.

##### 4.2.9.2

The offeror shall provide a top-level IMS as part of the proposal submittal. The more detailed levels of the IMS, as well as updates, will be submitted after contract award as a CDRL deliverable. The IMS is intended as a tool for day-to-day tracking of the program/project that rolls up to increasingly higher summary levels. All tasks/activities in the IMS should be logically linked together showing predecessor/successor relationships. The activities and tasks will be sufficient to account for the entire program under contract. Key elements of the IMS include:

(a) Milestone/Event - A specific definable accomplishment in the program/project network, recognizable at a particular point in time.

(b) Activity or Task - A time consuming element, e.g., work in progress between interdependent events, represented in an activity box. Activities are numbered and are contained within an activity box. The left side represents the beginning of the activity, and the right side is the completion of the activity.

(c) Duration - The length of time estimated to accomplish an activity (disregarding the "calendar impact"). Rationale should also be provided supporting the derivation of the durations including ground rules and assumptions (e.g., historical data, experience on similar efforts, vendor schedules, number of work days per week, number of shifts, company holidays). In addition, the offeror shall provide a supporting narrative for the network diagram that explains the basis for the estimated durations of those activities on the critical path(s) and for activities designated as high risk. Any unusual aspects of the proposed approach to the program shall also be described.

(d) Constraint - A line that defines how two activities or events are logically linked.

Finish-to-Start (FS) - An activity must finish before another can start. The offeror shall provide a brief narrative for all activities that do not have FS relationships and how the respective relationship was determined and the lead or lag estimated.

Start-to-Start (SS) - An activity depends on the start of another activity.

Finish-to-Finish (FF) - One activity cannot finish until another activity finishes.

Start-to-Finish (SF) - An activity cannot finish until another activity starts.

(e) Total Slack or Float - Extra time available on an activity before it will impact another activity on the critical path.

(f) Free Slack or Float - Extra time available on an activity before it will impact an activity on another successor activity.

(g) Lead - The amount of time of the overlap between where a successor task begins and a predecessor task completes.

(h) Lag - The amount of time between the end of a predecessor task and the beginning of a successor task.

(i) Critical Path - A sequence of activities in the network that has the longest total duration through the program/project. Activities along the critical path have zero or negative slack/float. It should be easily distinguished on the report formats.

(j) Target Start (TS) - Date when an activity should start.

(k) Target Complete (TC) - Date when an activity should finish.

(l) Actual Start (AS) - Actual start date of an activity.

(m) Actual Finish (AF) - Actual finish date of an activity.

(n) Early Start (ES) - The earliest date an activity can start.

(o) Early Finish (EF) - The earliest date an activity can end.

(p) Late Start (LS) - The latest date an activity can start without delaying the program/project target completion date.

(q) Late Finish (LF) - The latest finish date an activity can have without affecting the program/project target completion date.

(r) Gantt Chart - A graphical display of program activities and key milestones that depict work activities in an integrated fashion. Represent activities by bars showing the length of time for each activity.

## 5.0 Instructions for Preparation of Volume III - Cost/Price Volume

### 5.1 Introduction

#### 5.1.1 Cost Information Requirements and Cost Credibility

These instructions are to assist the offeror in developing and presenting the information required to support the cost proposal. Proper presentation and adequate supporting documentation shall ensure that the cost/price proposal is fairly evaluated and that the government is able to understand all assumptions concerning the costs presented in the proposal. The burden of proof for cost credibility rests with the offeror; therefore, you are cautioned to submit cost information that is fully responsive to Federal Acquisition Regulation (FAR) requirements. The Cost to the Government Panel (also known as the Cost Panel) will evaluate the offeror's cost proposal relative to the criteria of realism and reasonableness, as well as analyze and understand the proposal so comparisons can be made between the offeror's funding requirements and the Government approved funds programmed for the effort.

#### 5.1.2 Estimating Techniques, Tools, Methods, and Documentation

When responding to the Cost Volume requirements in the RFP, the offeror and its associated subcontractors may use any generally accepted estimating techniques, including contemporary estimating methods such as Cost- to-Cost and Cost to Non-Cost Estimating Relationships (CER's); commercially available parametric cost models; in-house developed parametric models; etc. to develop its estimates. Refer to the Defense Contract Audit Agency (DCAA) Contract Audit Manual (CAM), Chapter 9-1000, Section 10 "Review of Parametric Cost Estimates" for guidelines.

The offeror shall model their cost proposal via the use of Excel 97 in support of their cost proposal. The Excel soft copy provided by the offeror must be a working model of the cost proposal that is based on the offeror's various estimating methodologies used in the proposal. For example, if hours were moved among fiscal years, the Excel model would automatically recalculate the fiscal year funding required. As a further example, if labor rates were changed, the Excel model would automatically recalculate the new fiscal year funding requirements. The Excel Model CD-ROM or disk(s) shall be compatible with Microsoft Excel 97 software format. Offerors are required to submit electronic files using Excel with adequate documentation to support the Basis of Estimate as described in Section 3.4, Chapter 2. For an example of documentation to support an estimate using Excel, see Attachment A.

### 5.2.0 General Instructions and Ground Rules

#### 5.2.1 General Instructions

Cost/Price means Cost to the Government.

Proposals should be based on government fiscal year, which begins on 1 October and ends on 30 September.

Proposals shall be in Then Year (TY) Dollars. TY Dollars are dollars that have been escalated into the time period of the performance of the contract. They are sometimes referred to as "escalated dollars," or "inflated dollars."



All costs are to be displayed by WBS and CLIN.

Dollars shall be displayed in the same units (millions, thousands, and so on) for each program phase.

The cost volume shall be prefaced by a table of contents and shall specify, by page number, where each cost format and each piece of narrative data is located.

Each page of cost information shall contain subtotals at logical breaks and totals as appropriate.

Costs/prices shall be specifically identified either as System Design and Development (SDD) or Operations and Support.

Each cost form or format must clearly indicate, whenever applicable:

- Whether costs are for Systems Development and Demonstration (SDD) or Operations Sustainment
- Appropriate WBS/CLIN numbers
- Units for dollars or labor hours (e.g., millions, thousands, whole numbers)
- Applicable quantity information
- Whether the costs are contract or Budgetary (i.e., not a part of the instant contract or options)
- Whether the costs are Recurring or Non-recurring

Escalation of rates: Identify the escalation rates (SDD) used for materials, equipment, subcontracts, direct labor and indirect expenses. Describe the bases of the escalation rates and explain why they should be considered reasonable and realistic.

#### 5.2.2 Ground Rules

- Certified cost/pricing data is not required from the offerors.
- Development Costs. Development costs shall be incrementally funded, and when displayed by FY, will include the Government's termination liability (contractor expenditures plus non-cancelable commitments) for each fiscal year at WBS Level One (at the total program line). The termination liability shall be displayed as a "Non-Add" row in the Excel format.

### 5.3 Preparation and Requirements for the Cost/Price Information

All cost information shall be submitted as a separate volume. This volume shall be divided into chapters as shown in paragraphs 5.3.1 and 5.3.2.

#### 5.3.1 Person-loading/Material Summary and Bases of Estimate

As a separate attachment to the cost/price volume, submit a summary of the total proposed hourly requirements by CWBS element. These hourly requirements are to include the bidders hours, subcontractor(s) and inter-divisional transfer(s) hours broken out by applicable labor categories. Also include the basis of estimate sheets supporting the proposed hours, materiel, and other direct costs in this attachment.

#### 5.3.2 Accounting System

Indicate whether you have Government approval of your accounting system and if so, provide evidence of such approval. Also identify any deviations from your standard procedures in preparing this proposal.

#### 5.3.3 Cost Volume Contents

Chapter 1 - General Information. Table of contents, index, summary, changes in estimating or accounting practices, RFP exceptions and or deviations.

Chapter 2 - Cost Estimate Formats and Basis of Estimate Documentation. Excel Spreadsheets, WBS/CLIN/SOW Matrix, Software Parametric Forms, and accompanying narrative with supporting data, which explains how the proposed cost estimates were developed, (i.e., Basis of Estimates) for R&D and Operations Sustainment.

Chapter 3 - Other Information. The offeror shall include any other cost/price relevant to the proposal information. An example of other information could be Government Furnished Property (GFP)(to include Equipment, Facilities, Software, Information, Material, or any other government owned commodity). Information relating to GFP shall include a complete priced list and appropriate authorization letters (to include specific need dates) for use of GFP.

#### 5.3.4 Information Requirements and Instructions for the Cost Volume.

##### Chapter 1 General Information

- Table of Contents. The table of contents shall identify the paragraph and page numbers of the contents of the volume.

- Changes in Estimating or Accounting Practices. When the proposal is submitted, any changes during the last three years in the offeror's estimating or accounting practices that impact the proposal's historical data or basic assumptions must be described and fully explained in writing. The offeror shall also submit any changes to his accounting system that are planned or which are required to comply with requirements for the acquisition phase. As part of the source selection evaluation, the government may conduct a Pre-Award Survey (PAS) at the offeror's facility. This survey will address the offeror's financial capability to perform the subject contract and the adequacy of the offerors cost accounting system to accumulate and bill costs incurred for the subject contract.

- RFP Exceptions and/or Deviations. The offeror shall comply to the maximum extent with the intent of the cost instructions in supplying information that is current, timely, and in full support of the proposal. Exceptions or deviations to the solicitation requirements must be fully documented and explained. The instructions for preparation of the content of the Cost Volume shall not take precedence over requirements of other clauses of the contract, Public Law, or the Federal Acquisition Regulations.

- Estimating System. Provide a summary description of your standard estimating system or methods used to price each CWBS cost element. Also, identify any deviations from your standard estimating procedures in preparing this proposal.

##### Chapter 2 - Cost Estimate Formats and Basis of Estimate

- WBS Information. Per paragraph 4.2.4 of Sec L, the offeror shall develop a product oriented Work Breakdown Structure (WBS). It is desirable that it be based on MIL-HDBK-881. As a minimum, the WBS must include all elements identified in the Work Breakdown Structure (WBS)/Contract Line Item Number (CLIN)/Statement Of Work (SOW) Matrix at Attachment B. If the offeror does not follow MIL-HDBK-881 in developing their WBS, the offeror shall provide a written description of the WBS elements. The offeror shall complete the WBS/CLIN/SOW Matrix by fiscal year for each WBS element identified in the sample matrix at Attachment B.

- Cost Summary by Cost Elements. The offeror shall provide a cost summary by major cost elements by CLIN. The offeror shall use FAR Table 15-2 as the prescribed format. The cost summary must include but is not limited to the following categories:

## SCHEDULE OF CHANGES

- Prime Hours
- Inter-Divisional Hours
- Subcontractor Hours
- o Total Hours
- Direct Labor
- Overhead
- Material
- Subcontracts
- Interdivisional
- Other Direct Costs
- o Subtotal
- G&A
- o Estimated Cost
- Facilities Capital Cost of Money
- Fee/Profit
- o Total
- 

- Ground rules and assumptions. Identify all ground rules and assumptions used in developing your cost proposal.

- Where cost estimates are based upon past experience, identify the past experience, explain how the past experience relates to the current effort and how cost data available from the past experience was adapted to the current effort.

- - If labor hours have been estimated based upon other than past experience, provide detail rationale on how they have been estimated. If a Cost Estimating Relationship (CER) was accomplished, provide the CER along with the CER source, inputs used, and justification for inputs used in the CER.

- - Where cost estimates are based upon learning and/or improvement curve applications, identify the specific area subject to learning, the curve hypotheses (unit or cumulative) and the slope of the curve as a percent. Also identify the data used to develop the slope and explain how this data relates to the current effort and how entry onto the learning curve was attained (i.e., how the first unit cost was derived). If labor hours have been estimated based upon other than past experience, provide detailed rationale on how they have been estimated. If your normal estimating system uses an enterprise-wide average for proposal purposes, so state.

- -Provide a list of all subcontracts proposed on this effort. This list shall include the name of the subcontractor, type of contract, dollar value and basis of estimate (e.g., ROM, engineering estimate, or firm quote).

- - Explain any crosschecks or "tests of reasonableness" performed to substantiate the primary estimating methodology (or contractor estimate). Cite the source of the data (e.g., name and date of study, and name and parameters of cost model or CER).

- Software Parametric Data. A Software Parametric Data Sheet shall be submitted for each proposed spiral by Computer Software Configuration Item (CSCI), including subcontracted software. In addition, the offeror shall provide key software parameters as shown in Attachment D for all software purchased, developed or modified for laboratory use, if the cost of such software will be charged to this contract.

- Basis of Estimate. The offeror shall submit detailed data supporting the estimates. The detailed data shall completely describe the philosophy and methodology used in developing the estimates together with appropriate references to any historical supporting cost data. Where historical data does not support the proposed prices, a detailed explanation of why the current estimate varies from such data shall be required. All supporting data describing the basis of estimate shall be submitted in the Excel documentation format (See Attachment A).

## Chapter 3 - Other Information:

- **Wrap Rates.** The offeror shall construct functional wrap rates in TY\$ using the format that follows. These wrap rates are to include Direct Labor, Overhead, Other Costs, G&A, Facilities Capital Cost of Money (FCCM), and Profit/Fee. The Other Costs are, by definition, only those elements that have a direct cause and effect relationship to the direct labor base for that function (i.e., Engineering, Manufacturing, Tooling, Quality Assurance, and Other). Please identify what elements are included in these Other Costs. Also, for any additional other elements of cost, which do not have a direct cause and effect relationship but must be recognized to reach the bottom line, (labor or material), provide Wrap add-on Rates that will load these elements through the cost line. The offeror shall address the basis of wrap rates, i.e., Forward Pricing Rate Proposal, Forward Pricing Rate Agreements, new competitive rate structure, etc. The offeror shall ensure all rates are calculated in accordance with applicable Cost Accounting Standards.

## WRAP RATE FORM

## FUNCTIONAL CATEGORY: (EXAMPLE - ENGINEERING)

	FY	FY	FY	FY	FY
DIRECT LABOR					
OVERHEAD					
APPLICABLE OTHER COSTS					
GENERAL & ADMIN					
FCCOM					
PROFIT/FEE					

## TOTAL WRAP RATE

NOTE 1: Wrap rates are to be developed in Then Year (TY) dollars.

NOTE 2: FCCOM and PROFIT/FEE are not multiplicative, i.e., Profit cannot be included in FCCOM calculation base, and FCCOM cannot be included in Profit/Fee calculation base.

- **Cost Contract Parameters.** The offeror shall fully address all proposed target costs and award fees (combined if applicable) for the proposed program effort and depict graphically.

- **Government Furnished Equipment/Facilities/Information/Material/Property (GFE/F/I/M/P).** The offeror shall list and provide all current market value costs/prices for any required GFE/F/I/M/P. This list shall address need dates of any and all proposed modifications. If a GFE/F/I/M/P list is already provided in another part of the proposal/contract, provide a reference to it here.

- **Limitation of Government Obligation (LOGO).** IAW FAR 1.602-2, the Contracting Officer (CO) shall ensure that for the initial contract award, sufficient funds are available for obligation. To ensure executability of the initial contract, the LOGO profile for this contracted effort is disclosed as follows:

Funding type	FY 04	FY 05	FY 06	FY 07	FY 08	FY 09	Total
<b>3400 (O&amp;M)</b>	<b>0.2 M</b>	<b>2.0 M</b>	<b>2.0 M</b>	<b>2.0 M</b>	<b>2.0 M</b>	<b>2.0 M</b>	<b>10.5 M (CLINS 0001-0006)</b>
<b>3600 (R&amp;D)</b>	<b>0.5 M</b>	<b>2.5 M</b>	<b>2.5 M</b>	<b>2.5 M</b>	<b>2.5 M</b>	<b>2.5 M</b>	<b>13.0 M (CLINS 0007-0011)</b>

- **Government Termination Liability Profile.** The offeror shall provide an estimate of the Government's total termination liability costs for development funded effort for each FY, from the start of the development effort to the end of the contract (production is fully funded). Total termination liability is defined as expenditures plus non-cancelable commitments and shall reflect expected expenditures by FY

over the life of the program, tracking to proposed target costs and closing with a zero balance at the projected end of the program. Provision of this data is necessary to ensure the Government cost team has appropriate information to develop the Most Probable Cost estimate. **(Sentence deleted)**

Subcontractor Information. The offeror shall provide proposals for all subcontracts over \$10 Million or 10% of the contracted effort, whichever is less. In addition, for each cost type subcontract which equates to 20% or greater of the overall contract value, the same level of cost information detail is required as the prime contractor as was described in the previous chapters. Directions from the prior chapters should be used in preparing the subcontractor information in your response for those subcontracts with a 20% or greater total contract value. The offeror shall also provide any adjustments taken to the subcontract proposed values and the rationale for those adjustments. Finally, the offeror shall provide his analysis for any subcontractor's proposal valued at \$550 Thousand or greater.

- Subcontractor Information. If proposed costs have been decreased due to management reductions, the offeror shall provide a cost element summary and complete rationale containing the following: a complete description of the initiative, the maturity of the initiative, other programs on which the initiative has been implemented, and quantitative results.

- Commonality with Other Programs. Any cost reductions made in the proposal that are attributed to commonality with other programs, company-funded efforts, or capitalization of equipment must be supported with the following:

(1) Commonality - Identify the specific program(s) and why it is applicable. - Address the cost allowability and allocability of this action per FAR and your CAS disclosure statement.

(2) Company Funded Efforts - Identify the specific efforts, the planned start and end dates, the applicability to the current solicitation, the source of company funding and how you plan to account for or allocate these costs in accordance with generally accepted accounting principles, and your CAS Disclosure Statement, if applicable.

(3) Capital Equipment - Identify the specific item(s) capitalized and what other applications exist for the equipment, provide corporate approvals for each action, address the cost allowability and allocability of the action per the FAR and your CAS disclosure statement.

## 6.0 Instructions for Preparation of Volume IV - Contract Documentation

### 6.1 Model Contract/Representations and Certifications

This volume provides information to the Government to use to prepare the contract document and supporting file. The offeror's proposal shall include a signed copy of the Model Contract consisting of Sections A through K. This includes:

#### 6.1.1 Section A - Solicitation/Contract Form

Complete blocks 12, 14, 15, 16, 17, and 18 of the Standard Form (SF) 33. Signature by the offeror on the SF33 constitutes an offer that the Government may accept. The "original" copy shall be clearly marked, be under separate cover, and shall be provided without any punched holes.

#### 6.1.2 Section B - Supplies or Services and Prices/Costs

Provide proposed unit price and total item amount for CLIN 0001. Provide proposed unit price, total item amount and proposed period of performance for CLIN 0007. CLIN 0012, Data, will be: Not Separately Priced (NSP). Complete clause B038, Contract Type: Cost-Plus-Award-Fee, paragraphs (a), (b), and (c).

#### 6.1.3 Section F - Deliveries or Performance

Provide proposed delivery schedule set forth by CLIN.

#### 6.1.4 Section G - Contract Administration Data

Complete the information required by all full text contract clauses.

#### 6.1.5 Section H - Special Contract Requirements

Complete clause H001, Options, Paragraphs A and B.

Complete clause H040, Associate Contractor Agreements, paragraph (h).

#### 6.1.6 Section I - Contract Clauses

##### 6.1.7 Section K - Representations, Certifications, and Other Statements of Offerors

Complete the representations, certifications, acknowledgments, and statements.

#### 6.2 Exceptions to Terms and Conditions

Exceptions taken to terms and conditions of the model contract, to any of its attachments, or to other parts of the solicitation shall be identified. Specifically relate each exception to each paragraph and/or specific part of the solicitation to which the exception is taken. Provide rationale in support of the exception and fully explain its impact, if any, on the performance, schedule, cost, and specific requirements of the solicitation. Provide this information in the format and content of Table 6.2. Failure to comply with the terms and conditions of the solicitation may result in the offeror being removed from consideration for award.

##### Table 6.2 - Solicitation Exceptions

SOLICITATION Document: SOO, SOW, Spec, Model Contract, ITO, etc.

Paragraph/Page: Applicable Page and Paragraph Numbers

Requirement/ Portion: Identify the requirement or portion to which exception is taken

Rationale: Justify why the requirement will not be met

#### 6.3 Other Information Required

##### 6.3.1 Authorized Offeror Personnel

6.3.1.1 Provide the name, title, and telephone number of the company/division point of contact regarding decisions made with respect to the proposal and who can obligate the company contractually. Also, identify those individuals authorized to negotiate with the Government.

6.3.1.2 The Source Selection Authority may elect to contact the selected and non-selected offerors in order to notify them of the award decision. Therefore, provide the name, title, and telephone number of the offeror's Chief Executive Officer, President, Division President, and/or Vice President, etc., who should be contacted (if such contact is made).

##### 6.3.2 Government Offices

Provide the mailing address, telephone numbers, fax numbers, e-mail address, and facility codes for the cognizant Contract Administration Office, DCAA, and Government Paying Office. Also, provide the name, telephone number, fax number, and e-mail address for the ACO.

##### 6.3.3 Company/Division Address, Identifying Codes, and Applicable Designations

Provide company/division's street address, county, and facility code, CAGE code, DUNS code, size of business (large or small), and labor surplus area designation. Provide the same information if the work for this contract will be performed at any other location(s). List all locations where work is to be performed and indicate whether such facility is a division, affiliate, or subcontractor; also list the percentage of work to be performed at each location.

#### 6.3.4 Attachments to the Model Contract

The offeror shall provide the following as attachments to the completed model contract:

##### 6.3.4.1 Subcontracting Plan

Provide a Subcontracting Plan in accordance with FAR 19.702, Statutory Requirements, and 19.704, Subcontracting Plan Requirements, as supplemented by DFARS 219.704, Subcontracting Plan Requirements. NOTE: The plan must be approved by the Contracting Officer before contract award.

##### 6.3.4.2 Participation of Small Disadvantaged Businesses (SDB)

IAW the requirements of FAR provision 52.219-24, Small Disadvantaged Business Participation Program-Targets, the offeror must provide targets, expressed as dollars and percentages of total contract value, for SDB participation in any of the Standard Industrial Classification Code (SIC) Major Groups as determined by the Department of Commerce. The authorized SIC Major Groups are 10, 12 - 17, 22 - 31 34, 36 - 42, 44, 46 - 65, 67, 70, 73, 75, 76, 80, 82, 87, and 89. These SIC Major Groups are also posted at <http://www.arnet.gov/Reference/sdbadjustments.htm>. The targets may provide for participation by a prime contractor, joint venture partner, teaming arrangement member, or subcontractor; however, the targets for subcontractors must be listed separately.

##### 6.3.4.3 Participation of Small Businesses (SB), Historically Black Colleges and Universities, or Minority Institutions (HBCU/MI)

If the offeror is other than a small business, the offeror shall submit a Small Business Subcontracting Plan IAW FAR clause 52.219-9, Small Business Subcontracting Plan, that also identifies and specifies the extent of the offeror's commitment to the participation of small businesses (SB), historically black colleges or universities (HBCU) and minority institutions (MI), whether as joint venture members, teaming arrangement partners, or subcontractors. If applicable, submit a copy of the offeror's approved Master Plan. If the offeror has negotiated a comprehensive subcontracting plan pursuant to DFARS 219.702, Statutory Requirements, the offeror must submit the information that identifies and specifies the extent of its commitment to the participation of SB, HBCU and MI.

##### 6.3.4.4 Make or Buy

Include a Make or Buy Plan IAW FAR 15.407-2, Make-or-Buy Programs.

##### 6.3.4.5 Government Furnished Property (GFP) and/or Base Support Requirements

The Government plans to provide the GFP and Base Support items listed in the attachment of the solicitation entitled Government Furnished Property (GFP). If the offeror requires the use of Government furnished items other than those specified, the offeror shall provide a listing to include quantity, federal stock number, nomenclature, date needed and duration of availability, rental value per FAR 45.1, General, and 45.2, Competitive Advantage, reason for need, and cross reference to cost/price volume paragraphs which pertain to GFP and/or Base Support. The offeror shall also provide the written authorization for use from the cognizant ACO. The offeror shall supply this information in the format shown in Table 6.3.4.5

Table 6.3.4.5 - Required Information for Using GFP/Base Support (with example)

Quantity	: 2 EA
Federal Stock #:	FS156-09-234
Nomen-clature:	ACG-1372 Time Counter
Duration of Need:	1 Oct 93 - 30 Dec 94
Rental Value:	\$1,000
Reason for Need:	Needed to calibrate our 5 mhz/1pps SATCOM simulator offset
Cross Ref. to Cost Prop:	Volume III-23 - 27

##### 6.3.4.6 Associate Contractor Agreements

At a minimum, the offeror shall provide a copy of an Associate Contractor Agreement or provide a letter of intent to enter into an Associate Contractor Agreement with:

ENSCO  
445 Pineda Court  
Melbourne, FL 32940

Quantum Technology Services, Inc (QTSI)  
1980 North Atlantic Ave. Suite 707  
Cocoa Beach, FL 32931

The offeror shall provide a copy of Associate Contractor Agreements and/or letters of intent with any potential Associate Contractor.

#### 6.3.4.7 Required Attachments

Provide other attachments, e.g., SOW, SS, CWBS, IMP, IMS, completed CDRL, etc.

### 7.0 Instructions for Preparation of Volume V - Relevant Past and Present Performance

#### 7.1 General

Each offeror shall submit a past and present performance volume containing past performance information IAW the format contained below. This information is required for the offeror and all subcontractors, teaming partners, and/or joint venture partners proposing to perform 10% or more of the proposed effort based on the total proposed cost or to perform aspects of the effort the offeror considers critical to overall successful performance. Offerors are cautioned that the Government will use data provided by each offeror in this volume and data obtained from other sources in the evaluation of past and present performance. The offeror shall submit, along with the information required in this paragraph, a consent letter, executed by each subcontractor, teaming partner, and/or joint venture partner, authorizing release of adverse past performance information to the offeror so the offeror can respond to such information. For each identified effort for a commercial customer, the offeror shall also submit a client authorization letter authorizing release to the Government of requested information on the offeror's performance.

#### 7.2 Early Proposal Information

The offeror is requested to submit the information shown below for each relevant contract 15 days prior to the date set for receipt of proposals. Failure to submit early proposal information will not result in offeror disqualification.

#### 7.3 Relevant Contracts

IAW L-106, submit past performance information on up to ten prime/subcontractor contracts the offeror considers most relevant in demonstrating the ability to perform the proposed effort. Include rationale supporting the relevance assertion. Note that the Government will not consider performance on a newly awarded contract without a performance history or on an effort that concluded more than three years prior to this source selection.

##### 7.3.1 Specific Content

Explain what aspects of the contracts are deemed relevant to the proposed effort and to what aspects of the proposed effort they relate. This may include a discussion of efforts accomplished by the offeror to resolve problems encountered on prior contracts as well as part efforts to identify and manage program risk. Merely having problems does not automatically equate to a little or no confidence rating, since the problems encountered may have been on a more complex program, or the offeror may have subsequently demonstrated the ability to overcome the problems encountered. Clearly demonstrate management actions employed in overcoming problems and the effects of those actions, in terms of improvements achieved or problems rectified. For example, submittal of quality performance indicators or other management indicators that clearly support that an offeror has overcome past problems is required. Categorize the relevance information into the specific Mission Capability subfactors that will be used to evaluate the proposal.

##### 7.3.2 Organizational Structure Change History



Many companies have acquired, been acquired by, or otherwise merged with other companies, and/or reorganized their divisions, business groups, subsidiary companies, etc., In many cases, these changes have taken place during the time of performance of relevant past or present efforts or between conclusion of recent past efforts and this source selection. As a result, it is sometimes difficult to determine what past performance is relevant to this acquisition. To facilitate this relevancy determination, include in this proposal volume a "roadmap" describing all such changes in the organization of the company. As part of this explanation, show how these changes impact the relevance of any efforts identified for past performance evaluation/performance confidence assessment. Since the Government intends to consider present and past performance information provided by other sources as well as that provided by the offeror, the "roadmap" should be both specifically applicable to the efforts identified and general enough to apply to efforts on which the Government receives information from other sources.

#### 7.4 Past Performance Information Format

Provide the information requested below in this format for each contract/program being described. Provide frank, concise comments regarding performance on the contracts identified. Provide a separate, completed form for each contract/program submitted. Limit the number of past efforts and the length of each submission to the limitations set forth in Table 2.3 above.

##### A. Offeror Name (Company Division):

CAGE Code:

DUNS Number:

NOTE: If the company or division performing this effort is different than the offeror or the relevance of this effort to the instant acquisition is impacted by any company/corporate organizational change, note those changes. Refer to the organizational structure change history (see paragraph 7.3.2 above) provided as part of the past performance volume.

##### B. Program Title:

##### C. Contract Specifics:

1. Contracting Agency or Customer:
2. Contract Number:
3. Contract Type:
4. Period of Performance:
5. Original Contract \$ Value (Do not include unexercised options):
6. Current Contract \$ Value (Do not include unexercised options):
7. If the Amounts for #5 and #6 are Different, Provide a Brief Description of the Reason:

##### D. Brief Description of Effort as \_\_\_Prime or \_\_\_Subcontractor:

NOTE: Indicate whether effort was development and/or production or other acquisition type/phase. Highlight portions considered most relevant to current acquisition.

##### E. Completion Date:

1. Original Date:
2. Current Schedule:
3. Estimate at Completion:
4. How Many Times Changed:
5. Primary Causes of Change:

##### F. Primary Customer Points of Contact:

NOTE: For Government contracts, provide current information about all three individuals. For commercial contracts, provide points of contact fulfilling these same roles.

##### 1. Program Manager:

Name:

Office:

Address:

Telephone:

E-mail Address:

2. Contracting Officer:

Name:

Office:

Address:

Telephone:

E-mail Address:

3. Administrative Contracting Officer:

Name:

Office:

Address:

Telephone:

E-mail Address:

G. Address any technical (or other area) features about this contract/program considered unique.

H. For each of the applicable subfactors under the Mission Capability factor set forth in Section M, Evaluation Factors for Award, illustrate how the experience on this program applies to that subfactor.

I. Specify, by name, any key individual(s) who participated in this program and are proposed to support this instant acquisition. Also, indicate his/her contractual roles for both acquisitions.

J. Include relevant information concerning compliance with FAR clause 52.219-8, Utilization of Small Business Concerns, on the contract being submitted.

K. Identify whether a subcontracting plan was required by the contract being submitted. If one was required, identify, in percentage terms, the planned versus achieved goals during contract performance. If goals were not met, provide explanation for not meeting the goals.

L. Describe the nature or portion of the work on the proposed effort to be performed by the business entity being reported here. Also, estimate the percentage of the total proposed effort to be performed by this entity and whether this entity will be performing as the prime, subcontractor, or a corporate division related to the prime (define relationship).

<end of clause>

*The following clauses are changed in Section M:*

**M003 EVALUATION FACTORS FOR AWARD (Dec 2003)**

1.0 SOURCE SELECTION. This is a best value source selection conducted in accordance with (IAW) the latest version of the following documents: the Federal Acquisition Regulation (FAR) Subpart 15.3, Source Selection, as supplemented by the Defense FAR Supplement (DFARS), the Air Force FAR Supplement (AFFARS) and the Air Force Materiel Command FAR Supplement (AFMCFARS) thereto. The Government reserves the right to award a contract based on initial proposals, as received, without discussion.

2.0 BASIS FOR CONTRACT AWARD. The Government will select the best overall offer, based upon an integrated assessment against the evaluation factors set forth and described below. A contract may be awarded to the offeror who is deemed responsible IAW the FAR, as supplemented, and whose proposal conforms to the solicitation's requirements (to include all stated terms, conditions, representations, certifications, and all other information required by Section L of this solicitation) and is judged, based on the evaluation factors, to represent the best value to the Government.

2.1 The Government seeks to award to the offeror who gives the Air Force the greatest confidence that it will best meet or exceed the requirements affordably. This may result in an award to a higher rated, higher priced offeror, where the decision is consistent with the evaluation factors and the Source

Selection Authority (SSA) reasonably determines that the technical superiority and/or overall business approach and/or superior past performance of the higher priced offeror outweighs the cost difference.

2.2 The Government seeks to select an offeror whose proposal is time-and-effort-phased to achieve the most synergistic (technical-schedule-cost effective) balance between delivery of threshold requirements and delivery of desired objective capabilities. Therefore, the Government reserves the right to (1) give greater weight to offerors judged capable of delivering thresholds early in the period of performance while adhering to funding constraints identified, (2) give positive consideration for performance in excess of threshold requirements up to the objective requirements, and (3) may give further positive consideration for performance in excess of the desired objectives.

2.3 To arrive at a source selection decision, the SSA will integrate the Source Selection Evaluation Team's (SSET's) evaluations of the evaluation factors and sub factors described below. When the integrated assessment of all aspects of the evaluation is accomplished, the color ratings, proposal risk ratings, performance confidence assessment, and evaluated cost/price will be considered in the order of priority listed in paragraph 8.0 below. Any of these considerations can influence the SSA's decision.

2.4 While the Government source selection evaluation team and the SSA will strive for maximum objectivity, the source selection process, by its nature, is subjective and, therefore, professional judgment is implicit throughout the entire process.

3.0 REJECTION OF UNREALISTIC OFFERS. The Government may reject any proposal that is evaluated to be unrealistic in terms of program commitments, including contract terms and conditions and contract place of performance (AFTAC facility), or unrealistically high or low in cost when compared to Government estimates, such that the proposal is deemed to reflect an inherent lack of competence or failure to comprehend the complexity and risks of the program.

4.0 CORRECTION POTENTIAL OF PROPOSALS. The Government will consider, throughout the evaluation, the correction potential of any deficiency or proposal inadequacy. The judgment of such correction potential is within the sole discretion of the Government. If an aspect of an offeror's proposal not meeting the Government's requirements is not considered correctable, the offeror may be eliminated from the competitive range.

5.0 DISCUSSIONS. If, during the evaluation, it is determined to be in the best interest of the Government to hold discussions, the offeror's responses to Evaluation Notices (ENs) and the Final Proposal Revision (FPR) will be considered in making the source selection decision.

6.0 COMPETITIVE ADVANTAGE FROM USE OF GFP. The Government will eliminate any competitive advantage resulting from an offeror's proposed use of Government-furnished property (GFP).

7.0 NUMBER OF CONTRACTS TO BE AWARDED. The Government intends to award one contract for the US NDC Phase 3 Program; however, it retains the right to award no contract at all - depending on the quality of the proposal(s) submitted and the availability of funds.

## 8.0 EVALUATION FACTORS AND THEIR RELATIVE ORDER OF IMPORTANCE

Award will be made to the offeror proposing the combination most advantageous to the Government based upon an integrated assessment of the evaluation factors and sub factors (and elements, if used). Evaluation Factors and Sub factors and their Relative Order of Importance are described below. Mission Capability and Past Performance are of equal importance and are more important than Proposal Risk and Cost/Price. Proposal Risk is more important than Cost/Price. The Mission Capability sub factors are of equal importance to each other. Mission Capability, Past Performance, and Proposal Risk, when combined, are significantly more important than cost/price; however, cost/price will contribute substantially to the best value selection decision.

### 8.1 Factor: Mission Capability

- 8.1.1 Sub factor: Transition
- 8.1.2 Sub factor: Total System Integration Responsibility
- 8.1.3 Sub factor: System Engineering/Program Management
- 8.1.4 Sub factor: System Performance

8.2 Factor: Past Performance

8.3 Factor: Proposal Risk

8.4 Factor: Cost/Price

## 9.0 RATINGS

9.1 Mission Capability. A color rating will be assigned to each sub factor. The color rating will depict how the offeror's proposal exceeds, meets, or fails to meet the Mission Capability sub factor requirements IAW the stated explanation, within the sub factor, of how the sub factor will be evaluated.

9.2 Past Performance. A performance confidence assessment rating will be assigned to the Past Performance factor. Performance confidence will represent the assessment of the probability of an offeror successfully performing as proposed. Performance confidence is derived from an evaluation of the offeror's present and past work record.

9.3 Proposal Risk. A risk rating will be assigned to each of the Mission Capability sub factors. Proposal Risk will represent the risks identified with the offeror's proposed approach as it relates to each Mission Capability sub factor and the Price Factor.

9.4 Cost/Price. Cost/price proposals will be evaluated to ensure realism and reasonableness. This evaluation will include the requirements and considerations set forth below.

9.5 Surveys and Capability/Capacity Reviews. Information gathered during any surveys or reviews at the contractor's facility(s) may be used in the evaluation of the offeror's written proposal.

9.5.1 These surveys/reviews may be conducted by the SSET, Defense Contract Management Agency (DCMA), or other Government organizations.

9.5.2 The information may be used to judge, e.g., the offeror's potential for correcting deficiencies, quality of practices/processes, or other areas useful in evaluating the proposal.

9.5.3 If conducted, the survey/review results will be assessed under the applicable factors/sub factors and will be used to validate and confirm the offeror's written proposal.

10.0 INTEGRATED ASSESSMENT. After the integrated assessment of all aspects of the evaluation is accomplished, the mission capability ratings, performance confidence assessment ratings, proposal risk ratings, and evaluated cost/price will be considered in the order of importance set forth above. Any of these considerations can influence the SSA's decision.

11.0 MISSION CAPABILITY FACTOR. Each subfactor (and element, if used) within the Mission Capability Factor will receive one of the color ratings described in AFFARS 5315.305(a)(3)(i), based on the assessed strengths and proposal inadequacies and deficiencies of each offeror's proposal as they relate to each of the Mission Capability subfactors. Subfactor ratings shall not be rolled up into an overall color rating for the Mission Capability factor.

11.1 Subfactor: Transition. This subfactor will evaluate the offeror's proposal for adequacy of its approach to meet the requirements of the contract during the transition period from the current contractor. This subfactor is successfully met when the offeror's proposal demonstrates the following:

11.1.1 The capability to provide sufficient initial staffing with skilled, technically qualified personnel possessing the required security clearances at the start of the contract who can meet all Statement of Work (SOW) requirements initially and during the transition period.

11.1.2 Ability to manage multiple and diverse support requirements at Patrick AFB and remote sites; and ability to provide the necessary skills capable of supporting a wide variety of network configurations, hardware, and software.

11.1.3 The ability to provide an orderly transition from the previous and current US NDC requirements.

11.1.4 The ability to provide an orderly transition of ongoing US NDC projects.

11.1.5 The ability to continue to meet the system operational availability rate (99%) requirements in the SRD.

11.2 Subfactor: Total System Integration Responsibility (TSIR). This subfactor will evaluate the offeror's proposal to assure understanding of all aspects of system integration for the US NDC system as set forth in the Statement of Objectives (SOO) and SRD. The subfactor will evaluate the offeror's proposed integration of the system's software suite, to include (1) integration with the government furnished property (GFP) hardware and other equipment and (2) the design of the data transfer system, core processing, and architecture solution that maximizes the use of commercial industry processes for achieving US NDC Phase 3 requirements. Emphasis will be placed on system growth capability and flexibility to meet future requirements for the US NDC system as well as possible upgrades, e.g., interfacing with third party software developers and incorporating operational requirements from other locations. Also, the evaluation will address system vulnerability and the system reliability and maintainability (R&M) attributes when subjected to the US NDC operating conditions. This subfactor is successfully met when the offeror's proposal demonstrates the following:

11.2.1 A design that incorporates an integrated solution that satisfies all requirements of the SRD and is substantiated in the US NDC System Specification, to include growth potential for future US NDC system requirements.

11.2.2 An integrated solution that provides a sound approach to testing and authentication (such as Functional Qualification Testing (FQT) and Functional Configuration Audit (FCA)) that ensures minimum impact to system downtime and addresses all potential risks with appropriate mitigation of these risks.

11.2.3 A sound approach for managing the integration of the US NDC system with third-party supplied products, such as SEATools, Tuxedo, Oracle, and Knowledge Base products.

11.2.4 Associate Contractor Agreements (ACAs). Include an executed/negotiated, ready-to-execute letter of intent or proposed approach for obtaining an ACA.

11.2.5 A sound approach to integrate newly-developed offeror software into the US NDC system.

11.2.6 An adequate management, and sound technical, approach to integrate new data acquisition systems with the US NDC system.

11.2.7 An approach describing actions required to implement sustainment and development changes to integrate hardware and software within the framework of internal Air Force Technical Applications Center (AFTAC) processes and existing infrastructure.

11.3 Subfactor: Systems Engineering and Program Management. This subfactor will evaluate the offeror's proposal for the approaches, plans, processes, and techniques to implement systems engineering and program management to meet the requirements of the US NDC program. Systems engineering includes risk management, configuration management, software development, software quality assurance, process control, data management, performance-based measurements, and test planning and execution. The offeror's proposed SOW, SRD, systems specification, Integrated Master Plan (IMP), Integrated Master Schedule (IMS), Contract Work Breakdown Structure (CWBS) and Definitions, Contract Data Requirements Lists (CDRLs), and key personnel qualifications will be evaluated to ensure the offeror has a clear understanding of the systems engineering/program management requirements, has a capability and technical knowledge to effectively manage the US NDC Phase 3 program, and has proposed in accordance with the SOO, SRD, and CDRLs. The offeror's response to a potential software capability evaluation that addresses the offeror's established processes, practices, and procedures will be evaluated to ascertain the soundness of software management, modification, testing, and integration approaches. Special emphasis will be given to test planning, configuration management, quality assurance (QA), and hardware/software integration planning. (Note: The integration aspects of systems

engineering will be evaluated as part of the TSIR subfactor.) This subfactor is successfully met when the offeror's proposal demonstrates the following:

11.3.1 System requirements analysis. This includes analyses of missions and environment, identification of functional requirements, and definition/refinement of performance and design constraints.

11.3.2 Functional analysis/allocation process. This includes decomposition to lower level functions, allocation of performance and other limiting requirements to all functional levels, and definition/refinement of functional interfaces (internal/external).

11.3.3 Synthesis processes. This includes transformation of architectures (functional to physical); definition of alternative systems concepts, configuration items, and systems elements; selection of preferred process solutions; and definition/refinement of physical interfaces.

11.3.4 System analysis and control processes. This includes risk management, configuration control, alternative solutions, data management, performance-based measurements, tradeoff studies, or any combination thereof. It also includes adequate configuration management processes, to include how to track "backing out" latent defects with unintended consequences, and tracking varying baselines between test, sustainment, training, operations, and the alternate US NDC systems.

11.3.5 Technical reviews and audits. This includes system/software requirements reviews (SRRs), system/software design reviews (SDRs), preliminary design reviews (PDRs), critical design reviews (CDRs), technical interchange meetings (TIMs), FQTs, physical configuration audits (PCAs), and specification verification and compliance. Also included are equivalent or similar processes if they constitute an improvement or replacement review/audit.

11.3.6 An acceptable approach to documenting, tracking, and archiving all significant tasks (e.g., meetings, reviews, and testing).

11.3.7 An acceptable program organizational structure to include placement within the company's management chain that provides corporate oversight and authority adequate to ensure timely program support.

11.3.8 An adequate description of acceptable inter-company relationships as well as program placement and reporting relationships within each company if the proposed approach includes a teaming or prime/major sub-contractor relationship.

11.3.9 An acceptable schedule, as set forth in the offeror's IMS.

11.3.9.1 Acceptability will be determined via a schedule assessment. The schedule assessment will analyze the offeror's IMS to provide a multifunctional, integrated understanding of the proposed schedule. It will establish a clear tracking among the technical, schedule, management, and cost aspects in order to give the Government confidence that the program is structured to be executable. The assessment will evaluate the schedule for realism, reasonableness, and completeness.

11.3.9.2 Realism: Assessing the impact of technical, schedule, and programmatic risk of the offeror's proposed schedule.

11.3.9.3 Reasonableness: Ensuring that the work proposed is included in the offeror's schedule and that the network logic is acceptable.

11.3.9.4 Completeness: Ensuring that the proposed schedule is responsive in meeting all solicitation requirements.

11.3.10 An acceptable methodology for resource allocation and management between the development and sustainment effort that ensures the operational US NDC system will meet mission requirements.

11.3.11 An acceptable approach to accomplishing delta (the difference between Phase 2 and Phase 3) general familiarization training for operators and/or maintainors (Air Force Skill Level 5).

11.3.12 An acceptable approach to accomplishing delta (the difference between Phase 2 and Phase 3) revisions to the current US NDC Technical Instructions (TIs) to ensure the accuracy and completeness of TIs.

11.4 Subfactor: System Performance. This subfactor will evaluate how well the offeror's proposed Phase 3 Spirals and the proposed system and subsystem specification meet the requirements of the SRD. The proposed system specification and SOW will be evaluated to ensure all requirements of the SOO and SRD have been adequately and accurately addressed. This subfactor is successfully met when the offeror's proposal demonstrates the following:

11.4.1 The offeror demonstrates the capability to develop software that meets all the threshold requirements defined in the SRD. The offeror shows that each threshold requirement is allocated to one

of a series of spiral/incremental builds. A strength may be assigned if the offeror demonstrates an acceptable approach in addressing requirements above the threshold, and up to the objective requirements, and any additional requirements proposed in the Phase 3 SRD.

#### 11.4.2 Global Association (GA) tuning.

##### 11.4.2.1 Scientifically supportable methodology for assessing the current state of tuning.

11.4.2.1.1 The offeror must (1) demonstrate a technical understanding of the problem of associating teleseismic and regional arrivals from a global network to create an earthquake bulletin, and (2) demonstrate practical experience working with global and regional network data to create an earthquake bulletin.

11.4.2.1.2 The offeror must (1) demonstrate an understanding of the type of information GA uses to associate arrivals and spiral events, (2) demonstrate an understanding of the process GA uses to identify phases, and (3) demonstrate an understanding of the process GA uses for event confirmation and conflict resolution.

##### 11.4.2.2 Valid proposed modifications to improve performance.

11.4.2.2.1 The offeror must demonstrate how it can combine its technical understanding and practical experience to improve the GA process.

11.4.2.2.2 The offeror must demonstrate how observed data can deviate from the idealized model(s) currently used to populate the GA grid and how this information can be used to help improve GA performance. The offeror must demonstrate an understanding of the potential problems and tradeoffs encountered when trying to associate arrivals observed around the world to create seismic events.

#### 11.4.3 Frequency-wavenumber (fk) Screening.

11.4.3.1 Scientifically supportable methodology for assessing the cause of improperly screened (deleted) arrivals.

11.4.3.1.1 The offeror must (1) demonstrate a technical understanding of the problem, and (2) demonstrate a practical experience working with seismic array data.

11.4.3.1.2 The offeror must demonstrate an understanding of the fundamental limitations, tradeoffs, and problems inherent in dealing with discretely sampled spatial data.

11.4.3.1.3 The offeror must (1) demonstrate experience working with observed array data and (2) demonstrate familiarity with real-world scenarios that can cause problems during automated processing.

11.4.3.2 Valid proposed station-specific modifications to fk feature extraction and screening that will reduce improperly screened arrivals.

11.4.3.2.1 The offeror must propose acceptable approaches that can be used to help mitigate problems encountered with real-world data. The offeror should (1) provide several examples/scenarios where processing can go awry causing detections to be improperly screened and (2) propose modifications to help reduce the number of such "missed" detections.

#### 11.4.4 Knowledge Base (KB) Integration.

11.4.4.1 Adequate technical approach to integrate third party research products, e.g., Sandia National Laboratory, AFTAC research, etc.

11.4.4.1.1 The offeror must demonstrate a capability to accommodate AFTAC's multiple, simultaneously ongoing projects, and that the US NDC contractor's prime responsibility is to sustain and evolve/integrate the operational US NDC system, both hardware and software, based on inputs from multiple sources.

11.4.4.1.2 The offeror must demonstrate, in a third party integration plan, an acceptable approach to working with other contractors to design Interface Control Documents to simplify integration of third party products into the operational system such that new software development is minimized and the reuse of existing software is maximized.

11.4.4.1.3 The offeror's third party integration plan must acceptably demonstrate an organizational structure that will engage third party efforts to ensure designs and object models are consistent.

11.4.4.1.4 The offeror's third party integration plan must not erect barriers to third party software products such as unique documentation or software testing requirements above and beyond what is required of the prime contractor.

11.4.4.1.5 The offeror must demonstrate familiarity with the research that is currently being conducted to support the National Nuclear Security Agency (NNSA) KB effort and the previously established procedures for integrating research results into the KB. Current research and integration procedures are contained in the following documents (available at the NNSA web site): (1) Nuclear Explosion Monitoring Research and Engineering Broad Agency Announcement (Solicitation Number DE-PS03-03SF22698), (2) National Nuclear Security Administration Knowledge Base Contributor's Guide (SAND 2002-2771), and

(3) The Integration Process for Incorporating Nuclear Explosion Monitoring Research Results into the National Nuclear Security Administration Knowledge Base (SAND 2002-2772).

11.4.4.2 Demonstrates a Sound technical approach for integrating regional magnitude algorithms and regional classification criteria from the KB into the operational system.

11.4.4.2.1 Demonstrates familiarity with the regional magnitude and classification research that is currently being done as part of the KB effort. The offeror's technical approach must demonstrate the ability to identify current US NDC software that can be reused/modified to support the integration of these products and describe the amount of new software development that will be necessary to support these products/efforts.

12. PAST PERFORMANCE FACTOR. The Government will evaluate the offeror's demonstrated record of contract compliance in supplying products and services that meet user's needs, to include cost and schedule. Each offeror will receive one of the ratings described in AFFARS 5315.305(a)(2)(S-92) for the Past Performance factor.

12.1 The past performance evaluation will be accomplished by reviewing the offeror's relevant present and recent past performance, focusing on performance which is relevant to the Mission Capability subfactors. Past performance information for the past three years shall be evaluated by the government.

12.2 Relevant efforts include, but are not limited to, domain expertise, software development and integration experience, contract/subcontract management, and scope of effort. More recent and relevant performance will have a greater impact on the performance confidence assessment rating than less recent or relevant effort. A strong record of relevant past performance may be considered more advantageous to the Government than a "Neutral/Unknown Confidence" rating. Likewise, a more relevant past performance record may receive a higher rating and be considered more favorably than a less relevant record of favorable performance.

12.3 Information evaluated may include data on efforts performed by the offeror's other divisions, critical subcontractors, or teaming contractors, if such resources will significantly influence the performance of the proposed effort.

12.4 The Government may consider as relevant efforts performed for agencies of the federal, state, or local governments and efforts performed for commercial customers.

12.5 The evaluation will consider information such as the offeror's history of forecasting and controlling costs, adhering to schedules (including the administrative aspects of performance), reasonable and cooperative behavior and commitment to customer satisfaction, and generally, the offeror's business-like concern for the interests of the customer.

12.6 The evaluation will consider the extent to which the offeror's past performance demonstrates compliance with FAR 52.219-8, Utilization of Small Business Concerns, and FAR 52.219-9, Small Business Subcontracting Plan.

12.7 Where the relevant performance record indicates performance problems, the Government will consider the number and severity of the problems and the appropriateness and effectiveness of any corrective actions taken (not just planned or promised). The Government may review more recent contracts or performance evaluations to ensure corrective actions have been implemented and to evaluate their effectiveness.

12.8 For offerors with no relevant performance record, the Government may consider relevant performance information regarding key personnel.

12.9 Offerors without a record of relevant past performance or for whom information on past performance is not available will not be evaluated favorably or unfavorably on past performance. The offeror will receive a "Neutral/Unknown Confidence" rating.

12.10 Past Performance information may be provided by the offeror and shall be obtained from the Past Performance Information Retrieval System (PPIRS), from questionnaires tailored to the circumstances of the acquisition, from Defense Contract Management Agency (DCMA), from interviews with program managers and contracting officer, or from other sources known to the government., including commercial sources.

12.11 The Government may use both data provided by the offeror and data obtained from other sources.

12.12 The past performance assessment results will be rolled up into an overall performance confidence assessment rating.



13. PROPOSAL RISK FACTOR. Proposal Risk will be evaluated at the Mission Capability subfactor level. This will be accomplished by evaluating weaknesses, significant weaknesses, and deficiencies and includes an assessment of the potential for disruption of schedule, increased cost (see 14.3 below), degradation of performance, and the need for increased Government oversight, as well as the likelihood of unsuccessful contract performance. For each identified risk, the evaluation will also address the offeror's proposal for mitigating the risk and why that approach is or is not manageable. Proposal risk ratings will not be rolled up into an overall risk rating.

14. COST/PRICE FACTOR.

The Cost Panel will evaluate the offeror's Cost Proposal against the following criteria:

- a. Realism. The costs in an offeror's proposal are realistic for the work to be performed, reflect a clear understanding of the requirements, and are consistent with the various elements of the offeror's technical proposal.
- b. Reasonableness. For a price to be reasonable, it must represent a price to the government that a prudent person would pay when consideration is given to prices in the market.

Most Probable Cost (MPC). The MPC will be calculated as the sum of the following and briefed to the Source Selection Authority (SSA):

- (1) System Development and Demonstration (SDD)
- (2) Operations Sustainment (O&S)
- (3) Other Government Costs.
- (4) Risk. The technical, schedule, and cost risk assessments of the offeror's proposal will be quantified where applicable and briefed to the SSA.

**In addition, Termination Liability will be presented to the SSA for consideration in the decision.**

The risk calculations will be an integrated assessment (technical, schedule, and cost) of the offeror's proposal. Risk areas will be quantified where applicable with risk dollars added per above paragraph.

- (5) Award Fee. Award fee will be included at the maximum amount available.

Pre-Award Survey (PAS). If the government chooses to conduct a PAS, the results of the survey will be presented to the SSA for their consideration.

Evaluation of options shall not obligate the Government to exercise such options.

**Offerors are cautioned against submitting a materially unbalanced offer. Unbalanced pricing exists when, despite an acceptable total evaluated price, the price of one or more contract line items is significantly over or understated as demonstrated by the application of price analysis techniques. An unbalanced offer may be rejected if it is determined that the lack of balance poses an unacceptable risk to the Government.**

**Offerors need to ship one hard copy and one electronic copy of volumes I-IV to:**

**ASC/AE  
Bldg 570, Room 113  
1755 Eleventh St  
WPAFB, OH 45433-7404  
ATTN: Janet Shaw**

Cost Template Attachments

ATCH A Excel Documentation  
 ATCH B WBS/CLIN/SOW Matrix  
 ATCH C Software Parametric Form

ATTACHMENT A

Excel Spreadsheet Format Documentation Example for Basis of Estimate

NOTE: This document should be prepared in MS Word as a separate attachment to the Excel Spreadsheet.

1. Cost Element:

This should reflect the full name of the item estimated. Indicate the program work breakdown structure number and the appropriate CLIN as applicable

Fiscal Year Spread (\$ in millions; whole hours):

	FY99	FY00	FY01	FY02	Total	
2. Hours						
3. Engineering		1,500	2,500	2,800	2,200	9,000
4. Tooling	0	0	0	0	0	
5. Quality	500	700	400	200	1,800	
6. Manufacturing		0	0	0	0	0
7.						
8. Dollars						
9. Labor	4.654	6.017	6.139	5.810	22.620	
10. Material	0.900	0.500	0.000	0.000	1.400	
11. Subcontracts		1.000	1.300	1.100	0.800	4.200
12.						
13. Total Price	6.554	7.817	7.239	6.610	28.220	

Also insert separate lines for Target Cost, FCCOM, Total Cost, and Proposed Fee.

Cost Element Contents:

Explain the major tasks to be accomplished. If non-recurring and recurring activity are contained in the same element, provide separate descriptions. Describe the functional labor groups included in this effort. Describe material or subcontract dollars, including any applicable quantity information. For subcontracted costs indicate whether the bid is a firm negotiated price, a budgetary quote, a Not to Exceed (NTE), or a Rough Order of Magnitude (ROM), etc. Show when the bid price was established and the date the quote remains valid.

Summary of Estimating and Fiscal Year Spread Techniques:

Briefly describe how the estimate was formulated. This section is intended to provide an overview of the estimate methodology, since the estimating detail is frequently extensive. Briefly explain how the hours and dollars were spread across the various government fiscal years. What estimating techniques or methodologies were employed and why. For example, grassroots (labor hour buildup), parametric model

estimate, or an analogy was used (if so what program was chosen and why?) Also, briefly explain how the hours/dollars were fiscally spread between SDD and Sustainment. Was it level of effort (LOE), was an OGIVE curve applied, was a percentage per year employed (if so, what was the rationale for it), etc.?

Note: Ensure that all acronyms are spelled out the first time they are introduced in the text or provide an acronym list in a separate section.

### 13.1 Detailed Basis of Estimate:

Provide a comprehensive explanation of how the estimate for this cost element was derived. All aspects of the estimate for this cost element should be discussed, and any facts pertinent to the derivation of the final estimate should be included. All data should be provided that is necessary to make the estimate "stand alone" and allow complete replication. Show calculations where appropriate and necessary (if too detailed, provide as back-up data to be included as part of an attachment). The narrative should explain the philosophy and methodology used in developing the estimate along with appropriate historical cost data illustrations. A detailed description of the cost estimating methodology should clearly show:

(a) Actual cost values used from current contracts or analogous programs. This data need only to be described in summary sufficient to support the Basis of Estimate.

(b) Source of direct labor hours and material estimates (include labor history if applicable).

(c) Basis or source of all factors used to estimate costs and the application of the base.

(d) Development or source of Cost Estimating Relationships (CERs).

(e) Development or source of cost models and parametric inputs.

If a manpower buildup approach was utilized, segregate the functional labor categories into the various skill mixes. For example, if software development is bid, the hours could be shown as:

Software Project Manager	800 hours
13.1.1 Senior Software Engineers	1,200 hours
Mid-Level Software Engineers	2,200 hours
Entry Level Software Engineers	1,800 hours
Systems Engineers	1,000 hours
13.1.2 Total Hours	7,000 hours

For subcontracted costs that are not explained in a separate section of the cost proposal (i.e., the high cost or "major" subcontractors as defined in the RFP), indicate whether the bid is a firm negotiated price, a budgetary quote, a Not to Exceed (NTE), a Rough Order of Magnitude (ROM) estimate, etc. Show when the bid price was established and the date the price quote remains valid.

**Risk Assessment:** Describe any areas of uncertainty, such as pending negotiations, concurrency, schedule risk, performance requirements that are not yet firm, appropriateness of analogous systems, critical assumptions, etc. Include a discussion of how risk was incorporated into the estimate. Identify the risk area(s) associated with this particular cost element (areas of uncertainty), e.g., software development and integration, testing, etc., and how "risk dollars" were quantified. Describe the impact of any assumptions that could significantly affect the realization of the estimated values.

**Sensitivity Analysis:** Describe any sensitivity analyses performed and the impact of changing variables on the entire estimate.

**Cross-checks:**

Explain any crosschecks or "tests of reasonableness" performed to substantiate the primary estimating methodology (or contractor estimate). Cite the source of the data (e.g., name and date of study, and name and parameters of cost model or CER).

SCHEDULE OF CHANGES

Attachment B: WBS/CLIN/SOW Matrix

Page 1 of 1

ACB Program (TY\$)

WBS Element	CLIN WBS #	Ref	Cost Form SOW Ref	SSDD	O & S	FY 04	FY 05	FY 06	FY 07	FY 08
TOTAL										
ABC System	1.0		X							
Prime Mission Product (PMP)		1.1			X					
Hardware	1.1.1		X							
Software	1.1.2		X							
Measuring	1.1.2.1		X							
Processing	1.1.2.2		X							
Database	1.1.2.3		X							
Security	1.1.2.4		X							
Integration	1.1.3		X							
SE/PM	1.2		X							
Systems Engineering		1.2.1			X					
Program Management		1.2.2			X					
System Test & Evaluation		1.3			X					
Development Test and Eval		1.3.1			X					
Operational Test and Eval		1.3.2								
Training	1.4		X							
Operator Training		1.4.1		X						
Maintenance Training		1.4.2			X					
Data	1.5		X							
Technical Publications		1.5.1			X					
Engineering	1.5.2		X							
Management		1.5.3		X						
Support	1.5.4		X							
Contractor Technical Support		1.6.2								
Operations & Support	2.0				X					
--Mission Personnel --Unit Level Consumption --Intermediate Maintenance --Depot Maintenance -- Contractor Support --Sustaining Support --Indirect Support Reserved 3.1 3.2 3.3 3.4 3.5 3.6 3.7 4.0 X X X X X X X										

ATTACHMENT C: SOFTWARE PARAMETRIC FORM

1. CSCI/CSC NAME
2. SYSTEM NAME
3. WBS ELEMENT

4. OPERATING ENVIRONMENT (CHECK ONE) (Keep in mind this describes not as much the location of software, but specifications it must meet.)

- |   |                        |
|---|------------------------|
| a. Production Center - Internally Developed | c. Military Ground     |
| f. Mil-Spec Avionics                        |                        |
| d. Military Mobile                          | g. Unmanned Space      |
| b. Production Center - Contracted Software  | e. Commercial Avionics |
| h. Manned Space                             |                        |

#### 5. INTEGRATION FACTORS

Internal Integration Factor- the level of difficulty of integrating the units to CSCs and the CSCs to the CSCI. Enter a decimal

between 0 and 1.

External Integration Factor- the level of difficulty of integrating this CSCI with others in the system. Enter a decimal value

between 0 and 1.

(See table below for typical examples.)

EXAMPLES OF FACTORS	LOW TEAM EXPERIENCE	NORMAL
EXPERIENCED TEAM		
HIGH EXPERIENCED TEAM		
Minimum Coupling&Timing Constraints	0.5	0.3
Strict Coupling & Timing Constraints	0.7	0.5
Strictest Coupling&Timing Constraint	1	0.7

6. UTILIZATION - Fraction of available memory/cycle time required by software. Use only hardware constrains development effort by either memory or timing.

Enter fraction of total available capacity utilized. Values of 50% or less have no effect on cost. The upper limit is 95%.

- |   |                                   |
|---|-----------------------------------|
| a. Percentage of available speed utilized | b. Percentage of available memory |
| space utilized                            |                                   |

7. SCHEDULE (Either SDR or SSR is mandatory. Other dates are optional.)

SCON The date the System Concept effort starts	TRR The date Test
Readiness Review completes	
SRR The date System Requirements Analysis completes	FCA The date
Functional Configuration Audit completes	
SDR The date System Design Review completes	PCA The Physical
Configuration Audit completes	
SSR The date Software Specification Review completes	FQR The date Formal
Qualification Review completes	
PDR The date Preliminary Design Review completes	OTE The date
Operational Test & Evaluation completes	

8. COMPLEXITY (Check one in each category - personnel, environment, and mnagement)

- |   |                                   |    |
|---|-----------------------------------|----|
| a. PERSONNEL                            | b. ENVIRONMENT                    | c. |
| MANAGEMENT FACTORS                      |                                   |    |
| Relatively Inexperienced-Many New Hires | Old Hat, Redo of Previous Project |    |
| Multinational Project                   |                                   |    |
| Mixed Experience-Some New Hires         | Familiar Type of Project          |    |
| More Than One Location/Organization     |                                   |    |

SCHEDULE OF CHANGES

Normal Crew-Experienced

Normal New Project

Extensive Experience-Some Top Talent

Exceptional Crew-Best Talent

9. PREPARED BY  
Code)

10. DATE

11. PHONE (Include DSN or Area

LAST NAME

FIRST MI

13. ADDRESS

12. TITLE

14. CITY

15. STATE

16. ZIP CODE (9-digit)

ATTACHMENT C: (Cont)

17.CSCI/CSC NAME

18. PROGRAMMING LANGUAGE

19. NUMBER OF SOURCE LINES OF CODE (SLOC)

20. PURCHASED PRICE (If applicable)

21. FRACTION OF SLOC THAT IS NON-EXECUTABLE

22. MIX (Each entry defines the fraction of total source instructions which falls into each application category. Entries for individual categories may be 0, but all entries must total 1.)

23. PROPORTIONS INSTRUCTIONS REQUIRING NEW EFFORT (All entries need not total 1.)

APPLICATIONS	IDENTIFYING CHARACTERISTICS	MIX	FRACTION REQUIRING
INSTRUCTIONS	NEW DESIGN	NEW CODING	FRACTION OF TOTAL SOURCE
OPERATING SYSTEMS	Task Management		

Memory Management  
Heavy Hardware Interface

Many Interactions

High reliability and strict  
timing req

INTERACTIVE Real time man/machine interfaces

OPERATIONS Human engineering considerations

and error protection very

important

## SCHEDULE OF CHANGES

REAL TIME COMMAND          Machine to machine communications

AND CONTROL          under tight timing constraints

    Queuing not practical  
    Heavy hardware interface

    Strict protocol requirements

ON-LINE  
COMMUNICATIONS          Machine to machine communications

    with queuing allowed  
    Timing restriction

DATA STORAGE AND          Operation of data storage devices

RETRIEVAL          Data base management  
                        Secondary storage handling  
  
                        Data blocking and de-blocking  
  
                        Hashing techniques

STRING          Hardware oriented  
                        Routine applications with no

MANIPULATION          overriding constraints  
  
                        Not oriented toward mathematics  
  
                        Typified by language compilers,  
  
                        sorting, formatting, buffer  
  
                        manipulation, etc.

MATHEMATICAL          Routine mathematical applications

OPERATIONS          with no overriding constraints

                        TOTAL FRACTION OF MIX                  0

ATTACHMENT C: (Cont)

24. SOFTWARE DEVELOPMENT TOOLS (Categorize the level of software tools available.)

    VERY HIGH: Automated project control system. Design tools. Automated documentation system.  
    Computer aided design tools. Computer programming  
    support library. Automated verification system & requirements specification analysis & language.  
    Cross compilers, data entry control tools, etc.  
    HIGH: Program design language. Automated programming support library. Software development  
    library. Automated data base design aid. Virtual  
    memory operating system. Basic text editor and text manager.

## SCHEDULE OF CHANGES

NOMINAL: Data base management system. Debugger, interactive source editor. Limited programming support library. Timesharing or real-time operating system. Overlay linker.

LOW: Limited library aids. Simple overlay linker, limited data base aids. Batch source editor, HOL compiler & macro assembler.

VERY LOW: Simple debugger, simple linker & monitor. Assembler.

### 25. COMPLEXITY FACTORS (Check factors that are applicable)

NEW HARDWARE PARALLEL	MANY CHANGING REQUIREMENTS	NEW LANGUAGE REQUIREMENTS	HARDWARE DEVELOPED IN	
26. PREPARED BY Area Code)		27. DATE	28. PHONE (Include DSN or	
LAST	FIRST	M.I.		
30. ADDRESS				
29. TITLE				
		31. CITY	32. STATE	33. ZIP CODE (9-digit)

### ATTACHMENT C: (Cont)

1. CSCI/CSC NAME - Enter the name of the Computer Software Configuration Item (CSCI) or Computer Software Component (CSC). The CSCI or CSC can be developed, purchased, or furnished (existing).

2. SYSTEM NAME - Enter the name of the specific software system, subsystem or module for which the data is being entered on the form.

3. WBS ELEMENT- Indicate the Work Breakdown Structure (WBS) elements used in the proposal, contract or RFP for which the form is Being prepared. Also provide the contract line item covering the contract dollars for this software development effort.

4. OPERATING ENVIRONMENT- Indicate the end use of the software system for which this form is being prepared, ie. Manned Space etc.

#### 5. INTEGRATION FACTORS

Internal Integration Factor - Enter a decimal value between 0 and 1 that best describes the level of difficulty in integrating and testing the units to CSCs and the CSCs to the CSCI. .5 represents a typical level of integration.

External Integration Factor - Enter a decimal value between 0 and 1 that best describes the level of difficulty in integrating and testing the CSCs to the System Level. .5 represents a typical level of integration. Refer to the table on the form for typical examples.

6. UTILIZATION - Indicate the percent of machine capacity required or expected to be used in running the system software in terms of memory and hardware speed used.

7. SCHEDULE - Enter the dates for each phase for the software effort for which this form is being prepared. The date for system design review (SDR) or software specification review (SSR) is a mandatory entry.

#### 8. COMPLEXITY

Personnel - refers to the type of people, experience levels and familiarity with the software languages, applications, and environment in which the software system must work.



Environment - Review this particular software system/module effort in terms of hardware and programming language required, the number of offices/organizations involved and the dynamics of the customer's requirements.

9-16 PREPARED BY- Enter the name of the preparer, date the form was prepared, telephone number including area code or DSN (if DoD military or civilian is the preparer), address to include office symbol, city, state, and 9-digit zip code.

17. CSCI/CSC NAME - Enter the name of the Computer Software Configuration Item (CSCI) or Computer Software Component (CSC). The CSCI or CSC can be developed, purchased or furnished (existing).

18. PROGRAMMING LANGUAGE- Define the higher order level (HOL) programming language being used; i.e. FORTRAN, JOVIAL, ADA.

19. SOURCE LINES OF CODE - Enter the total number of source lines of code to be developed and/or purchased. Comments imbedded in the code are not to be counted. However, type declaration and data statements should be included and will be broken out separately via the FRAC input. The formula for the total source line of code (SLOC) is as follows:  $SLOC = \text{furnished (existing)} + \text{developed (modified)} + \text{new}$ . Furnished existing software is software Which is included in the total lines of code count for the CSCI/CSC but does not require any modifications or additions.

20. PURCHASED PRICE - Enter the cost of the purchased software.

21. FRACTION OF SLOC THAT IS NON-EXECUTABLE (FRAC) - Enter the fractions of the source lines of code describing the type declarations and data statements. It is entered as a decimal number ranging from 0.0 to 1.0.

22. MIX - Enter the percentage of the source level instructions that relates to each category. The sum of the instruction percentage mix must sum to one.

23. PROPORTION INSTRUCTION REQUIRING NEW EFFORT - New design effort requires the percent of new design for each application category (block 6). New coding is the percent of new code required to complete that particular application category. All entries need not total to 1. The formula for computing new efforts either new design or new code is as follows:  $\text{new design \%} = \frac{\text{new design SLOC}}{\text{total SLOC}}$  or  $\text{new code \%} = \frac{\text{new code SLOC}}{\text{total SLOC}}$ . New design/code % is computed for each applicable application categories.

24. SOFTWARE DEVELOPMENT TOOLS - Choose the categories of software development tools that best define the tools that will be utilized during this software development effort.

25. COMPLEXITY FACTORS - Choose the factors that are applicable to the software development effort. Choose one factor for each category.

26-33. PREPARED BY - Enter the name of the preparer, date the form was prepared, telephone number including area code or DSN (if DoD military or civilian is the preparer), address to include office symbol, city, state, and 9-digit zip code.

15.0 AWARDABILITY. In addition to the above, offerors must successfully meet the following to be eligible for award. Failure to achieve these requirements may result in the offeror being removed from consideration for award.

15.1 Comply with all solicitation requirements, including but not limited to, contract terms and conditions, representations and certifications, and technical requirements.

15.2 All personnel who will perform on the contract must have a Secret clearance, and all key personnel must have a Top Secret Secure Compartmented Information (SCI) clearance.

15.3 Small business subcontracting opportunity. The offeror's Small Business Subcontracting Plan will be evaluated to determine the extent to which the offeror identifies and commits to the participation of small

business programs, as discussed in FAR Part 19, Small Business Programs, whether as joint venture members, through teaming arrangements, or as subcontractors.

15.4. Achieve favorable results from any surveys performed, e.g., preaward surveys (PAS) or any other capability/capacity reviews.

<end of clause>

*The following attachment/exhibit(s) are modified in Section J:*

**Attachment 7** AWARD FEE PLAN FOR UNITED STATES NATIONAL DATA CENTER (US NDC)

**Exhibit A** CONTRACT DATA REQUIREMENTS LIST (CDRLS)

The following CDRLS have been modified: Cover Sheet, A004, B010 and D001.

LIST OF ATTACHMENTS

DOCUMENT	PGS	DATE	TITLE
EXHIBIT A	29	04 JUN 2004	CONTRACT DATA REQUIREMENTS LIST (CDRLS)
ATTACHMENT 7	22	09 JUN 2004	AWARD FEE PLAN FOR UNITED STATES NATIONAL DATA CENTER (US NDC)